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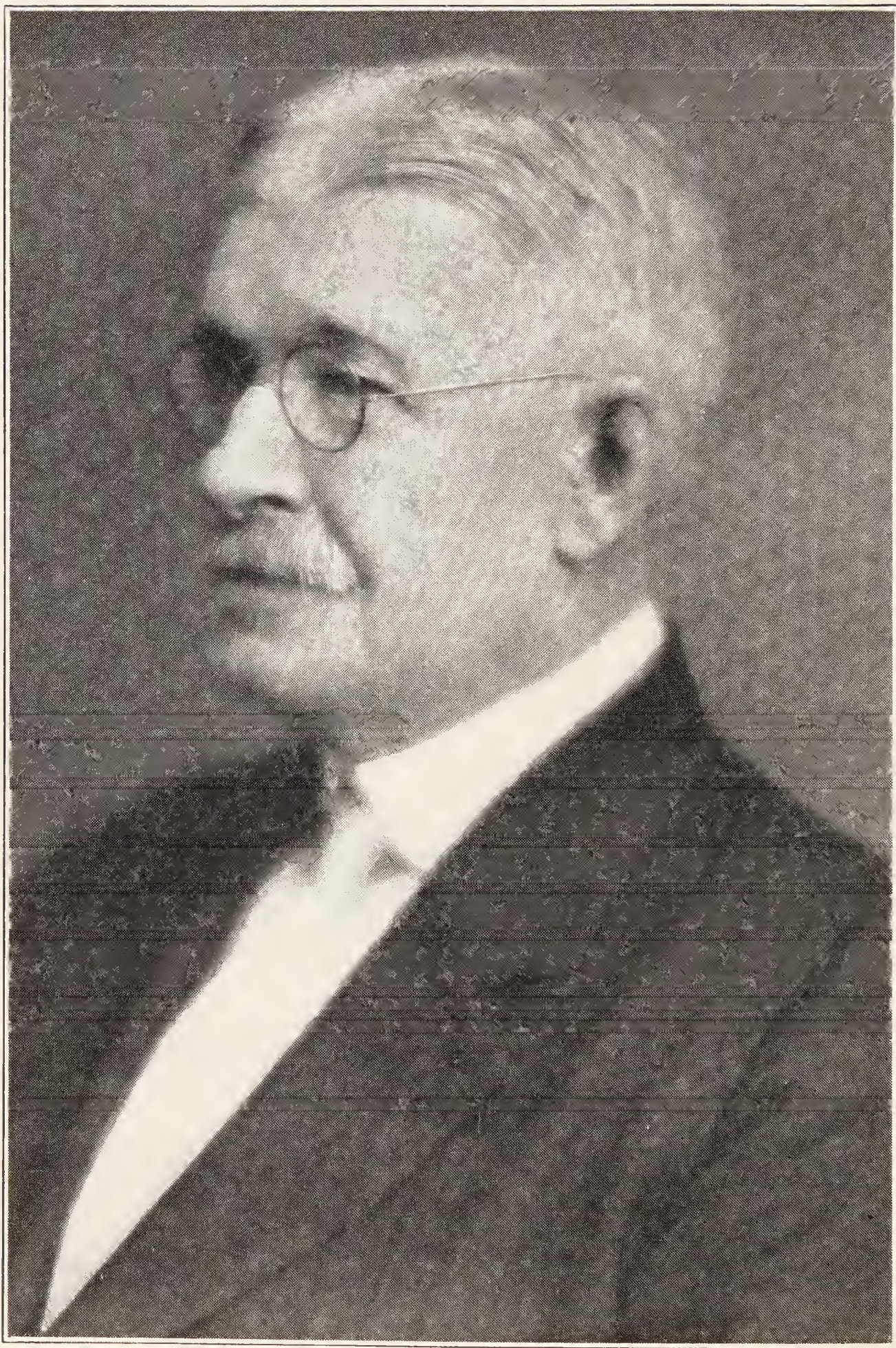


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DR. DAVID S. FAIRCHILD, SR.

History of Medicine in Iowa

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Clinton

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400

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THE IOWA PROFESSION IN THE GREAT WAR

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P R E F A C E

AS time passed and early settlers made their homes and one generation after another have come and gone, the world's outlook has changed. We now begin to have an interest in those who laid the foundation of our governmental, social, economic and professional life. It, therefore, follows that we have organized activities that may record and perpetuate the memory of those who made the first sacrifices which have brought us to our present state of advancement, comfort and security.

In no calling or profession have the changes been greater than in the healing art and none have contributed more to the welfare of the human race. If we reflect on the past we are impressed with the fact that before the time of Pasteur, medical activities were individualistic and whatever progress was made was in improving methods of drug treatment and the technique in a limited field of surgical endeavor.

The history of medicine in Iowa goes back scarcely more than a hundred years, but while in this short period Iowa's contributions to the advancement of medicine may have been small, nevertheless, there were groups of physicians who came to Iowa in its early days to help lay the foundations of a great and prosperous state.

They laid an obligation upon the present generation and generations to come.

The profession of today can do no less than record the contributions of these physicians before all that is known of them has faded from the memory of men.

In 1875 the author of this book was appointed on a committee to prepare a history of medicine in Iowa for the Centennial. Much information was secured from old practitioners who knew personally most of the pioneer doctors who first came to Iowa. These contributors have all passed away but the writer preserved their records and during the past fifteen years has secured from many family records valuable information, also, from the records of early medical societies, from various histories of Iowa, from the state library and the State Historical Society.

The most valuable contributions of many of the pioneer doctors were in developing the Territory and later the State. The country was thinly settled and their medical activities were limited. We have followed the organization of the State and Local Medical Societies, Medical Schools, Medical Journalism, Insane Hospitals, etc.

The limits of this history brings us up to 1870.

In a few important events we bring it down to a more recent date. But few of the men referred to are now living.

HISTORY OF MEDICINE IN IOWA

D. S. FAIRCHILD, M.D., F.A.C.S., Clinton

Part First—Extending from 1820 to 1840

History of Medicine in Iowa; particularly in the early days of its settlement, and the influence of medical practitioners in developing the state, including the history of medical schools, medical societies, and medical journals.

In our endeavor to revive the memory of early practitioners of Iowa we have been obliged to seek information from many sources. In 1875 we succeeded in securing data from older physicians then practicing who had been acquainted with the first physicians who came to Iowa to practice their profession. We succeeded in securing quite satisfactory information from the greater number of the older counties, which we have later been able to supplement through the courtesy of physicians who have kindly examined county records, from Gue's and Brigham's Histories of Iowa, and from the publications of the State Historical Society.

In an earlier publication on the early medical history of Iowa we limited our work to recording the history of individual counties, medical organization, biographical sketches and other matters having chiefly a local interest. We shall now attempt to disregard county lines and consider medical facts in chronological order pointing out the relation of medicine to the development of the state, the influences which led doctors to emigrate to Iowa and the influence the medical profession exercised on the welfare of

the state and the part taken by individual physicians in local and state affairs. Our former efforts to preserve the early record of physicians and their doings has some merit in so far as individual county medical organizations are concerned, but does not constitute a medical history of the state, which should include the early pioneers and later the coordination of the influences which go to make up the educational factors that lead to internal development and which may give the profession of Iowa a place suited to the peculiarities of environment, and their ability to contribute to the general fund of medical knowledge, also to demonstrate their fitness for organization and independent development.

There will be many omissions, no doubt, growing out of the fact that there were but few records made in early days that have been preserved. The early volumes of the transactions of the State Medical Society contain some helpful information extending as far back as 1868. The first volume of the Iowa Medico-Chirurgical Journal published in Keokuk in 1850 and kindly loaned to me by Dr. Frank Fuller and four copies of the Iowa Medical Journal, which succeeded the Iowa Medico-Chirurgical Journal, procured for me by Dr. Moorhead from the library of Dr. J. C. Hughes of Keokuk, the first medical editor in Iowa, The Iowa Medical Reporter published by Dr. F. E. Cruttenden and the later Iowa Medical Journal have furnished much valuable information.

Many of the medical men who came to Iowa early were not only physicians but like other men, interested in adventure, and in what might

happen and what opportunities might present themselves. Opportunities for the practice of medicine could only come with settlement, and communities more or less populous, but it always happens that when new colonies are formed men of all classes more or less skillful for one reason or another become a part of the enterprise.

Iowa, like the Western country, generally was interesting at first on account of the fur trade with the Indians. Trading stations were established at various points under the control of agencies located at various points, particularly at Prairie du Chiene and St. Louis. As the fur trade developed and as rivalries and disputes arose in which the Indians themselves came to be more or less involved, it was necessary to establish government agencies and temporary military posts to which surgeons were sometimes attached. We have endeavored as far as possible to find out who these men were but with small success, as in times gone by medical men in the service of the government received small consideration, and only incidentally are the army or post surgeons mentioned.

The country which was afterwards to be known as Iowa was marked only by its relation to the Mississippi River and the principle stream flowing into it (Des Moines River). It appears that in 1800, Jean Baptist Faribault established a trading post about two hundred miles above the mouth of the Des Moines River where he remained four years. In September, 1808, a fort was commenced at a point on the Mississippi and called Fort Madison. The fort was completed in 1809-10. In September of the same

year it was abandoned. Eighty-one men were stationed here including the factor and employes under the command of Lieut. Kingsley who was relieved in 1809 by Captain Horatio Stark, who was in turn relieved by Lieut. Thomas Hamilton. The records accessible to us do not show that a surgeon was detailed to Fort Madison although among the provisions for the fort was a surgeon's office.

There seems to have been but little interest shown as to the country west of the Mississippi now known as Iowa prior to about 1820. Up to that time Indian hunters and white traders roamed the prairies, but as settlers began to look beyond the great river for prospective homes, the government began to seek a fuller knowledge of this relatively unknown country. The discovery of lead in the vicinity of the future city of Dubuque by the Indians attracted the attention of white adventurers and the large trading post near by, Prairie du Chiene, gave Dubuque a prominence as an objective point, second only to Fort Madison, an outlying post from St. Louis, probably the most important trading point on the river.

Seeking among the names of the explorers, hunters and traders we find this brief notice—"On August 11, 1817 Major Long and Dr. Lane ascended for some distance the De Moyer River then at a low stage." It is to be presumed that Dr. Lane was an army surgeon connected with an exploring expedition. A little later we learn from an account written by Stephen Watts Kearny and Henry Schoolcraft of a military expedition across northern Iowa in 1820; that on

visiting Dubuque mines on the morning of August 5th Kearny stopped his six oared keel-boat at a settlement of traders, found Dr. Muir, late of the Army, with his squaw and two children, and that he and his men were treated politely by Dr. Muir and the traders. This was at a time when the Fox Indians owned the Dubuque lead mines discovered by Julian Dubuque, previously worked, however, by the Indians, and over which there was much controversy between the miners, traders and Indians. The Indians were repeatedly driven away by whites and reinstated by the government until after the close of the Blackhawk War in 1833, when by treaty with the Sacs and Foxes the government came into possession of eastern and northern Iowa.

Dr. Samuel C. Muir was a graduate of the University of Edinburg and a surgeon in the United States Army. Sometime before 1820 Dr. Muir married a girl of the Sac Nation and about the date above mentioned he was stationed with a command at Fort Edwards now Warsaw. Illinois. Some years later an order was issued requiring officers of the Army to abandon their Indian wives. Dr. Muir refused to comply with this order and resigned his commission. After leaving the Army Dr. Muir settled on his farm at the mouth of the Des Moines River where Keokuk now stands and where he died in 1832 of cholera leaving his family, wife and five children, in destitute circumstances, the greater part of his property being involved in litigation. Keokuk was then known as Pinch-e-chut-tech and Dr. Muir was the first white settler.

Dr. Isaac Galland with his family settled on

the west shore of the Mississippi in 1829 at a point called At-Wip--E-Tuck afterwards known as Nashville. Dr. Galland hoped to build a city here but Keokuk became too strong a competitor. It was here that the first white child was born (in Iowa) Eleanor Galland in 1830 and where the first school was held, taught by Gerryman Jennings. In 1836 Dr. Galland established the second newspaper published in Iowa called the *Western Adventurer*. Two years later the paper was sold to James G. Edwards and the name changed to "*Madison Patriot*." Dr. Galland then moved to Fort Madison. While at Montrose Dr. Galland wrote a book descriptive of Iowa from which we copy an abstract published in Gue's history of Iowa, Vol. I, page 153:

"As we passed up the river we saw the ruins of old Fort Madison about ten miles above the rapids, near a sand bluff rising perpendicular from the water's edge. On the second day after, our keel boat reached Shoe-o-con or Flint Hills. An Indian village of the Foxes stood at the mouth of the Flint Creek; its chief was Ti-me-a. In 1825 I took a trip with an ox team and an Indian guide up the river. We passed Wapello's village and crossed the Des Moines River on a raft. We ascended the high lands above Grave Yard Bluff (now Buena Vista). We followed the divide, passing a lone tree standing on the bluff, which was a land mark for the Indians. In the fall of 1825 I settled at Quash-qua-me village, where my father-in-law, Captain James White, had purchased the old trading house and a tract of land adjacent, which was an old Spanish grant made to Monsieur Julian, on which he

lived in 1805. Captain White made his first trip to this point on the steamer Mandan, which was the first that came to the foot of the Rapids."

Through the courtesy of Dr. C. F. Wahrer we have been able to secure the following additional history of Dr. Galland:

"The career of this most versatile character was picturesque and viewed from this distance of years most interesting and characteristic of the early settler.

"Dr. Galland was born in 1790 while his parents were on the way from Virginia to Marietta, Ohio. After he was of age he studied at Fulton County, Illinois, where afterward he began practice. In 1827 he moved to Lee County, Iowa, where he practiced at different times as well as in Hancock County, Illinois, where he lived a while just across the river from Montrose."

"It was said of him that he was a brilliant physician and that he was especially successful in the treatment of cholera which in his day often visited his field of practice, and in the prevention of the epidemic."

"Far and wide over a large field in almost every cabin he placed a chest or box about a foot cubic on which in red letters was printed the legend 'Dr. Isaac Galland's family medicines.'

"The box contained the usual and ordinary remedies ordinarily used by the doctors in those days, but were very helpful when physicians and drugs were scarce. The main time of his services as a physician in and about Montrose and Nashville, now Galland, a few miles below Montrose, was from 1833-39. He did not practice all the time but was employed in many pursuits.

Among them was, while he lived across the river in Illinois, his activity as a Mormon Elder, and the Prophet Joseph Smith's private secretary. When Smith lost prestige and his glory waned in Nauvoo Dr. Galland left the church. He was one of the organizers of the New York company that promoted some land scheme near Nauvoo, also wrote a history of Iowa, made a map of Iowa and in 1840 wrote a book 'The Iowa Emigrant' now almost extinct but for which a large price is paid when it can be obtained.

"He was a patron of schools and under his influence the first school in Lee county was taught, and its teacher, fuel and a room were all provided for by this indefatigable worker.

"He and Dr. Samuel C. Muir of Keokuk were great friends and worked together in all that pertained to their professional interests. The latter died in Keokuk in 1832.

"Between them they laid out the City of Keokuk and named most of its principal streets.

"His daughter Eleanor was the first white child born in Lee county.

"In a paper he edited for some time he described the prairies and waters of Iowa, its animals, serpents, birds, plants, the Indians, their lives and habits, and showed himself an able writer and historian.

"Not much is to be obtained of his early medical life. He was much esteemed by his patients as an able man, and enjoyed the confidence of all that came in contact with him. He died in 1858 and was buried in Fort Madison."

It is interesting to know of the friendly relations of these two men trained as practitioners of

medicine yet from environment having other interests. It will be seen in this and in numerous other instances that men educated as physicians had much to do with the development of the state. The educated doctor was peculiarly fitted to aid in the best way in pioneer work. His cultivated powers of observations, his freedom from prejudice and superstition, and his knowledge of the dangers surrounding the early settler made the doctor unquestionably the most valuable help to the settlement.

In the early and rather unsettled ownership of the Dubuque lead mines the name of a Dr. Jarrote appears in connection with a local organization for the government of the miners on the west side of the Mississippi River. It appears that Dr. Jarrote was elected the first governor and James L. Langworthy clerk of this organization which adopted a code to govern a rather unruly body of men. Dr. Jarrote was probably a man of executive ability as the laws framed by this organization are said to have been obeyed, and as rigidly enforced as have been the laws of later days.

Probably the first physician to locate in Iowa to practice medicine was Dr. Frederick Andros who came to Dubuque in 1833. At that time Iowa was a part of Michigan territory. (Four years before Michigan was admitted into the Union as a state.) Michigan territory included Wisconsin, Iowa, a part of Minnesota and the Dakotas. At the session of the Michigan territorial legislature held in 1829 a bill was introduced which provided that all of the territory lying south of the Wisconsin River, west of Lake Michigan and east of the Mississippi River and north of Illinois be

formed into a new county to be known as Iowa county and the county seat be located at Mineral Point. Dr. William Brown of Wayne county (Michigan) presented the petition on September 14, 1829, which was referred to the committee on territorial affairs, praying for the new county, and a bill was reported to organize the county of Iowa which became a law (Iowa County, Wisconsin with Mineral Point as county seat is now a part of the original Iowa county).

It is not known who drafted the bill but it is supposed to have been the work of Dr. William Brown or Henry Schoolcraft or of both and one of them suggested the name Iowa. The reason for the name is unknown (perhaps from the Ioway tribe of Indians). It is therefore quite probable that the name Iowa came from a doctor.

In October, 1835, George W. Jones was elected delegate to Congress to represent Michigan territory. He secured the passage of a bill creating the territory of Wisconsin which included Iowa, Minnesota and Dakota. Previous to this time, in 1834 at the Sixth Territorial Legislative Assembly of Michigan a bill was passed to divide the Iowa district into two counties, Dubuque county and Des Moines county, by running a line due west from the lower end of Rock Island. This was one year after Dr. Andros located in Dubuque. Two years later, or in 1836, when Dr. Andros had enjoyed practically the entire practice of medicine in Iowa for three years the population was 10,531.

Dr. Frederick Andros was a native of Massachusetts, a graduate from the literary department of Brown University, 1822 and from the medical

department in 1826, came to Dubuque in 1833. In 1837 he removed to Clayton county and engaged in farming. In 1845 he resumed practice having received the appointment of surgeon at Fort Atkinson and the Winnebago agency where he remained until the Indians were removed to Long Prairie, Minnesota in 1848. Dr. Andros went with the Indians and remained with them until 1854 when he returned to Garnavillo, Clayton county and resumed practice. In 1861 he removed to McGregor.

Dr. Henry H. Clark of McGregor in an address before the Iowa State Medical Society relates some personally reminiscences of this interesting man who had the courage to be the first to offer his professional services to the settlers of Iowa even before it became the Iowa territory. Dr. Clark came to McGregor in 1870 as a young graduate from the Chicago Medical College (Northwestern University) and soon became a close personal friend of Dr. Andros. We cannot do better than to present Dr. Clark's tribute to Dr. Andros in his own words.

"A few days after my arrival (McGregor) I called on the Doctor (Andros) then nearly seventy years old and presented my credentials. He gave me the 'glad hand' and we became firm friends.

"Some months before he had met with an accident which had severely impaired the strength and usefulness of his right hand. My association with him was therefore fortunate, for, while he was the surgeon and received the credit if any were due, and the emoluments if such were forthcoming, I did the work and gained the experience.

"Our association continued in this manner for about ten years when the Doctor decided Iowa was getting too civilized and tame and went west to grow up with the country. He was then eighty years old. After practicing in Dakota for ten years, he changed his residence to Minneapolis where he died at the age of ninety-one.

"Dr. Andros was far superior in intelligence and ability to the average physician of his day but he was typical frontiersman and something of a character. I remember a country drive I took with him a short time after I came to McGregor. He drove a good horse but he interfered so badly that either his right or left hind leg seemed to be in the air all the time. As we were jolting over a rough road back in the Mississippi hills the Doctor suddenly stopped his horse with the remark, 'There's the damndest nicest spring over there you ever saw.' We got out and walked over to where a fine stream of water gushed from the rocks and formed a pool about three feet in diameter and eighteen inches deep. The Doctor took off his high silk hat which he always wore and in which he carried his letters, red bandanna, cigars, stethoscope and always either a clean or dirty collar, pulled off his coat, rolled his sleeve to his elbow and thrust his hand to the bottom of the spring. After lifting aside a few stones he pulled out a flask of whiskey. He uncorked it, took a generous drink and then returned the bottle to the bottom of the spring for future use."

It is easy to understand that the practice of medicine in Iowa was anything but attractive in the early days. The first settlers did not come to Iowa to build towns or to establish centers of

trade but to find farms and build homes often without a definite location in view, traveling along in small companies until a desirable spot was found, and then a "settlement" was made.

The accidental selection of a location is illustrated by the tradition attached to the foundation of the village of Lost Nation in Clinton county. It is said that a family traveling with a company of pioneers accidentally wandered away from their companions and were lost. In endeavoring to find the main company they came to a desirable spot and "settled." It was not until several months later that the lost family was found. This circumstance led to the naming the place "Lost Nation." Many years passed before a physician felt a call to locate there.

With 1833, when Dr. Andros came to Dubuque, the history of the practice of medicine in Iowa may be said to have had its beginning. As we have already shown, the practice of medicine in Iowa in the early days of its settlement was neither attractive nor remunerative. The settlers were widely scattered and the towns were but little more than a closer aggregation of settlers with some facilities for trade and to supply families covering a wide extent of country with certain necessities of life. Widely scattered as the settlers were one necessity was perhaps greater than any other, and that was the need of relief in sickness and accident. It is true that the pioneers were a hardy people but sickness, suffering and accident did go with them and more than lay help was needed to meet certain exigencies of life, and there was withall a spirit of adventure that frequently led physicians of no mean

skill or ability to adventure into a new country to become pioneers in the building of homes, a civilization and a commonwealth.

We have endeavored to find the names of physicians who came to Iowa and the part they played in developing the territory and state from the earliest actual settlement. It is to be presumed from the character and the courage of these men that they were not content to limit their activities to the relief of the sick and injured alone, but must needs take a part in common with all pioneers in community welfare, and we shall not be mistaken in our estimate of Iowa pioneer physicians. From the very nature of their profession and its traditions the seeking of wealth and political advantage was the least of their ambition, and for that reason few names of physicians who gained wealth or political distinction will be found in the annals of history but their usefulness in very many ways will be held in the memory of men and on the pages of history, and the writer who shall undertake to say that the medical profession was only incidental to the development of the country is not entitled to serious consideration.

In June, 1834, Congress passed an act providing that; "All that part of the territory of the United States bounded on the east by the Mississippi River, on the south by the State of Missouri and a line drawn due west from the northwest corner of said state to the Missouri River on the southwest, and west by the Missouri River and the White Earth River falling into the same; and on the north by the northern boundary of the United States shall be attached to Michigan territory."

In October, 1835, George W. Jones, delegate to Congress from Michigan territory secured the passage of a bill creating the territory of Wisconsin which included Iowa, part of Minnesota and Dakota.

In July, 1838, Congress passed a bill establishing the territory of Iowa including that part of the territory of Wisconsin lying west of the Mississippi River.

At an extra session of the Sixth Legislative Assembly of the Michigan territory held in September, 1834 the Iowa district was divided into two counties, Dubuque county and Des Moines county by a line running due west from the lower end of Rock Island. At the second session of the Wisconsin territorial legislature held in Burlington in 1837, Dubuque county, and Des Moines county, were divided into sixteen counties.

We shall now follow as nearly as possible the appearance of physicians in these several counties and the work participated in by them in developing the territory and later the State of Iowa.

We shall for convenience endeavor as far as the data at hand will permit consider first the pioneer physicians who settled in Iowa prior to 1840. We have seen that Dr. Andros came first and has the distinction of being the first real pioneer physician to locate in the state for the distinct purpose of practicing medicine.

Through the cooperation of Dr. H. B. Young of Burlington who kindly examined the early records of Des Moines county we have been able to secure some valuable data in relation to early physician-settlers, which we have been able to supplement from other sources in several instances.

In 1832 Morton M. McCarver and Simpson S. White established a ferry across the Mississippi River at Burlington and were the first settlers. In the fall of the same year (1832) Dr. William R. Ross with Benjamin Tucker laid out and platted the City of Burlington. Dr. Ross brought a stock of goods. It is probable that his time was more occupied with trade than with the practice of medicine. A few settlers only had crossed the Mississippi and they were not of the kind who needed medical services.

Dr. Crawford from Brook County, Virginia, came to Burlington in 1833. Later he moved to Texas. We have been unable to secure further information in relation to this pioneer physician. Dr. Schiff came to Burlington from Kentucky in 1834 and Dr. Cutler from Indiana the same year. These two gentlemen formed a partnership. Dr. Cutler died soon after (within the year) and Dr. Schiff returned to Kentucky.

Dr. Teas located in Burlington in 1835 and Dr. D. W. Hitchcock came the same year from New York.

Dr. S. S. Ransome came to Burlington in 1835 where he remained until his death in 1872.

Dr. Enos Lowe came to Burlington in 1837. Dr. Lowe was a man of marked ability and great energy; representing a type of physician not uncommon in that day. Physicians who not only practiced medicine successfully but were important agents in the welfare service of the commonwealth in which they cast their lot.

The influence of these early physicians in the social and economic advancement of the territory and state cannot be over estimated. Nearly every

county in Iowa has had among its pioneers, men of this class, men whose title of doctor may have been forgotten, and only by painstaking inquiry have we been able to find that while serving in a public capacity they at the same time through their knowledge and skill as practitioners of medicine were rendering invaluable services to the settlers who, however hardy were not immune to distressing misfortunes, sickness and accident. Very few of these early physicians found time in the midst of public welfare service and professional duties to seek the fortunes sometimes secured by their better remembered associates whose activities were more distinctly personal. One of these public servants was Dr. Enos Lowe. Born in Guilford County, North Carolina, May 5, 1804. Graduated from the Ohio Medical College. Located in Greencastle, Indiana, later removed to the Black Hawk Purchase and located in Burlington, then a small frontier village, where he practiced medicine. He soon became identified with political and economic affairs, and was widely known and influential in various ways. Dr. Lowe was elected a member of the First Constitutional Convention. (The constitution framed by this first convention was rejected.) In 1846 a second convention was held and a constitution framed which was adopted, under which Iowa became a state. Dr. Enos Lowe was a member of the convention and had the honor of being elected to preside over the deliberations of this body. Dr. Lowe was active in the organization of the Iowa State Medical Society in 1850 and was elected its first president. In 1853 he was appointed receiver of the United States Land Office at Coun-

cil Bluffs. In 1854 he was one of a company that laid out and platted the future City of Omaha and became one of its first inhabitants.

At the breaking out of the Civil War, Dr. Lowe returned to Iowa and was appointed surgeon to the Fifth Iowa Infantry with which he served to the end of the war. He died February 13, 1880.

Two other physicians came to Des Moines county prior to 1840. One, Dr. Jeremiah Hall located in Danville, twelve miles west of Burlington in 1837 and the other, Dr. Leal Fullenwider located in Rorsak in the same year (1837).

One of the eight counties formed from the division of Des Moines county by the act of the Wisconsin Territorial Legislature at its second session in Burlington in 1837 was Johnson county. It may be observed in this connection that at this session delegates from the two original counties, Dubuque and Des Moines were elected to Memorialize Congress to organize a separate territorial government of the part of Wisconsin territory lying west of the Mississippi River, and in June, 1838, a bill was passed by Congress establishing the territory of Iowa, which included a part of Minnesota and Dakota. In 1839 the capital of the territory of Iowa was located at Iowa City and on August 18th a sale of lots was held and two hundred and six lots disposed of for \$28,854.75. That a stranger might find his way to the capital of Iowa Lyman Dillon was "employed to plow a furrow from Iowa City to the Mississippi River using a strong breaking plow and five yoke of oxen." This furrow of one hundred miles is said to be the longest furrow on record.

In 1838 the year following the organization of Iowa territory, Dr. Henry Murry came to Johnson county and located in Iowa City. Dr. Murry was born in Dublin, Ireland in 1816, graduated from the medical department of the University of Louisville, Kentucky. He was the first physician to settle within the present limits of Johnson county. Dr. Murry was a successful physician and surgeon and performed many capital surgical operations. He was at one time coroner and county physician. He died May 9, 1880.

The second physician to locate in Johnson county was Dr. Ezra Bliss. Dr. Bliss was of New England birth and a graduate from Castleton Medical College, Vermont in 1837. He came to Iowa City in 1839, a few months after Dr. Murry. After a few years of successful practice he moved to New York City, spending much of his time in Europe.

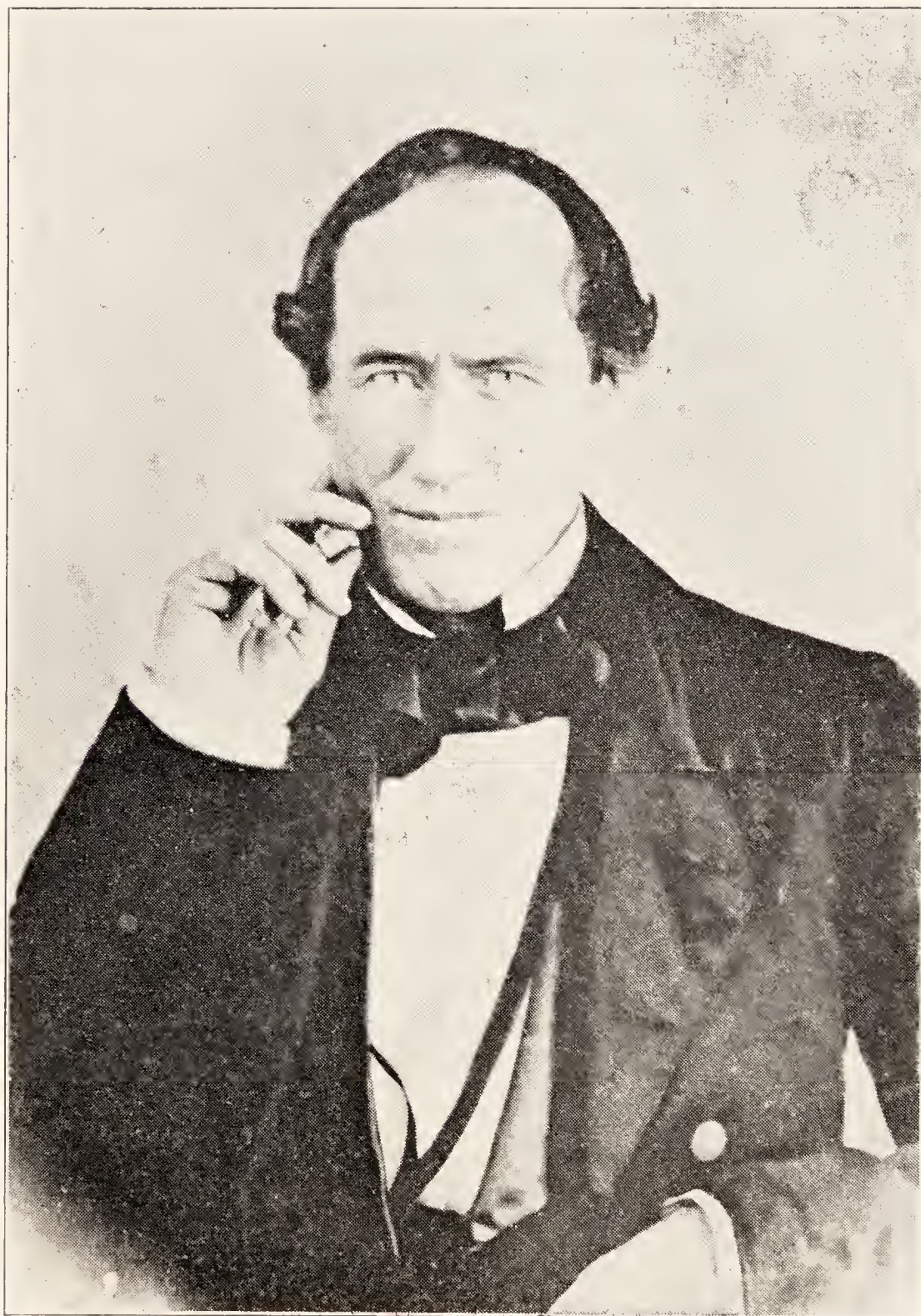
In examining the records of the Iowa State Medical Society and other documents pertaining to Iowa history the name of Dr. J. M. Robertson not unfrequently appeared but was unable to gather data enough to frame a biographical sketch.

I regretted the loss from our records of so valuable a man and eminent physician and publicist, when one day it occurred to me to appeal to Dr. Charles A. Robertson of Chicago a grandson of Dr. J. M. Robertson for help and it so chanced that on this very day and moment Dr. Charles appeared and in his bluff and friendly way assured me I should have what I desired.

James Moore Robertson, M.D., was born in Washington County, Pennsylvania, October 14,

1804. Died in Muscatine, Iowa, December 31, 1878. Dr. Robertson was a son of Peter Robertson, a native of Scotland who emigrated to Pennsylvania in his youth and who died when James was six years old. His mother was Jane Moore, a native of the United States of English ancestors. His mother died when he was sixteen years old and he was reared from that time by Dr. William Stephenson of Cannonsburg, Penn., who was a friend of his father. Dr. James M. Robertson received his literary education at Jefferson College, Cannonsburg, Pennsylvania, and his medical education from Jefferson Medical College, Philadelphia, from which institution he graduated in 1827. He entered practice at Georgetown, Lancaster County, Pennsylvania, where he remained six years. In the spring of 1833 he removed to Franklin County, Ohio, where he practiced five years and then removed to Burlington, Iowa, or Iowa Territory in 1838. After a few years practice in Burlington he moved to Columbus City which he helped to plat and where he practiced his profession until 1870 when he removed to Muscatine where he continued practice up to his retirement in 1874, after forty-seven years of extremely arduous service in his profession. It was now given him four years of rest until the final close of a most useful life at the age of seventy-four years.

While in Burlington and Columbus City, Dr. Robertson did a practice extending from Cedar Rapids to Keokuk mostly on horseback with an expenditure of strength and energy and with an endurance that can scarcely be appreciated by the practitioner of today.



JAMES MOORE ROBERTSON, M.D.

Born October 14, 1804
Died December 31, 1878

Dr. Robertson did much to help organize a new country and make treaties with the Indians whose language and customs were well known to both himself and his son William. He was a member of the Iowa State Medical Society, later vice-president and treasurer. He was a member of the Ohio State Medical Society. The Louisa and Muscatine County Medical Societies. In 1865 he was elected state senator and served four years. He was married to Maria Armstrong of Lancaster County, Pennsylvania, and had one son, William Stephenson Robertson.

Dr. James Moore Robertson was a man with many friends but no enemies. In politics he was staunch Republican. In religion a devout Presbyterian and for many years an elder in the church.

In personal appearance Dr. Robertson was tall and erect, wore a tall hat and blue broadcloth clothes. In appearance and address he was the type of a medical gentleman. The strong ancestral Scotch-English blood of Dr. James Moore Robertson made itself manifest in the son, Dr. William S. Robertson and in the grandson, Dr. Charles A. Robertson all of whom were eminent physicians of whom Iowa may well be proud.

Dr. Silas C. Swan, a native of New York and a graduate of a Chicago medical school located in Iowa City in 1839 where he died in 1845.

Dr. S. H. Tyron came to Marion, Lynn county about 1838. At that time few white settlers had arrived in Lynn county, which was not created and named until December, 1838. Marion was laid out and established as the county seat in 1839.

That part of Lynn county about Marion and

Cedar Rapids became the center of varied interests between the organization of the county in 1838 and 1849.

It is recorded that a store, a mill and a court house were built before the close of 1840. A Methodist church and a gang of horse thieves were organized, the latter having Cedar Rapids as its headquarters in the first cabin built on the present site of the City of Cedar Rapids by one Shepard, a notorious outlaw.

We have no information as to the nature of Dr. Tyron's practice, only that he was a well known character. He was at one time acting county clerk and occupied many places of trust and honor.

The history of medicine in Iowa commences with the appearance of Dr. Samuel C. Muir, an Army surgeon in 1820 and the first section ends with 1840. During this period many changes occurred of a territorial and governmental nature.

In 1834 Congress passed an act attaching all that territory bounded on the east by the Mississippi River, also fixing the other boundaries, to Michigan territory. In October, 1835, a bill was passed by Congress creating Wisconsin territory including also the territory bounded on the east by the Mississippi River. In July, 1838, Congress passed a bill establishing the Iowa territory. In July, 1837, the Wisconsin Territorial Legislature sitting in Burlington began dividing what was soon to become Iowa territory in counties. The two first to be known as Dubuque county and Des Moines county.

In 1836 a census showed a population within the present limits of 10,531. In 1840, 43,112.

During these territorial changes Dr. Frederick Andros located in Dubuque (1833). To Nashville came Dr. Galland (1829). To Burlington came Dr. William R. Ross (1832). Dr. Crawford (1833), Dr. Schiff and Dr. Cutter (1834), Dr. Teas, Dr. Hitchcock and Dr. S. S. Ransom (1835), Dr. Enos Lowe (1837), Dr. Jeremiah Hall, Danville (1837), Dr. Leal Fullenwider, Korsak (1837), Dr. James Moore Robertson, Burlington (1838). In 1839 there came to Iowa City, Dr. Henry Murry, Dr. Silas C. Swan, Dr. Ezra Bliss, and to Marion Lynn county came Dr. S. H. Tyron.

We have in the foregoing account of the early medical arrivals in Iowa attempted to point out as far as the records permit the work and activities of these men.

PRACTICE OF MEDICINE IN IOWA FROM 1840 TO 1850

PART SECOND

In the first section of our work of recording the adventures of early medical practitioners in Iowa, we have outlined some of the most important facts in the lives of seventeen men all of whom we believe were graduates of medical colleges in good standing. What their daily lives were and how they practiced medicine is left to the imagination of the reader.

There are still living, men whose experience goes back far enough to have an appreciation of what the practice of medicine on horseback means, but few can fully understand what a round of perhaps one patient visits meant, when three or four days were consumed and from 50 to 200 miles were traveled through mud or drifts, guided only by general direction, to meet perhaps, the most difficult and trying cases, with no one to advise, or with whom to divide responsibilities. This did not apply only to the men just mentioned, like Dr. J. M. Robertson, whose practice carried him all the way from Cedar Rapids to Keokuk, but also the medical practitioners who came in 1840-1850, or for the following twenty years in western Iowa.

In the decade from 1840 to 1850 an increasing number of physicians emigrated to Iowa to seek homes, and for the definite purpose of practicing medicine. The greater number of them had but recently graduated from medical colleges, or, after a short period of practice in, or near the home town, feeling their opportunities were few,

sought larger fields in the new West. Iowa appeared a fruitful field for the young physician with an ambition to succeed in many ways. Many met with disappointments and some returned to a more congenial professional atmosphere in older settled communities. The majority, however, struggled on to secure hoped for later rewards.

It thus happened that many pioneer settlements secured medical practitioners of a selected class, men of strength, courage and character.

It of course, often came about, that failures in other fields, poorly educated doctors, arrant quacks and unscrupulous charlatans of every species and character joined in the migration to the new country, who, after a short period of uncertain success disappeared. Of these men we have no record.

From 1840 to 1850, when the Iowa State Medical Society was organized, a group of notable practitioners of medicine located in Iowa. We have endeavored to seek them out and to assign to each the share due him in civic welfare, professional organization and progress. It may be assumed that organization is essential to progress. Civic organization became necessary as soon as settlement fairly began for the protection and welfare of those who had cast their lot in a new country and for those who were to come later. Isolated enterprise and individualistic effort could contribute but little to progress in general or to the community or state.

Medical practice has generally been looked upon as an individualistic effort to secure benefits to the individual members of the community; that the medical practitioners' function was secondary and subordinate to the immediate needs

of the afflicted and the unfortunate. In later times this view has changed in a very material way. Public health has been found so essential to community progress, that a disregard of this important fact has invariably led to misfortune and failure. It was only when medical organization had reached a high degree of development, and a dissemination of scientific knowledge of the nature and cause of diseases had come about, that the public began to see and appreciate the immense value of organized medical cooperation. It is greatly to be regretted that only a minority of the public can appreciate this even now. It is fortunate, however, that the minority having a clearer vision of public needs constitutes a predominating influence in public affairs and are slowly clearing up the waste places.

The physicians who came to Iowa between 1840 and 1850 to seek homes, represented the highest type of men, who were earnestly seeking fields of usefulness with the prospect of small pecuniary rewards, at least in the near future, but new experiences were particularly attractive to young men, as these men were. Some left an honorable record and many disappeared, probably attracted to other fields. Success in those days meant a degree of personal sacrifice, courage and determination, not ordinarily seen, and what success and reputation was finally secured was well earned. Doctors under these conditions, become resourceful and self-reliant, and were able to meet emergencies to a degree rarely seen today; while not possessing a great fund of scientific knowledge, they developed into strong men who wielded a great influence in their communities.

It was our privilege to know many of these men; they were not only wise physicians but also useful to a rare degree in public service in township, city, county and state service, probably not as much as officials, but influential in the selection of office holders and in directing the policies that had public welfare in view. Little opportunity was afforded for contributions to medical science and there seems to have been little disposition to record, "interesting cases," or personal experiences, unless they were of real interest. Their work was a silent influence that contributed to the general betterment of the community of which very little has been recorded and the name often remains only as a tradition. All this may be said of multitudes of men who early came to Iowa, but the medical practitioner had an immense advantage over most others in that his training fitted him to measure welfare programs by more accurate and logical standards.

Dr. Jess Bowen came to Iowa City in 1840. He was born in Virginia in 1806, came to Iowa from Indiana where he had served as state senator. Dr. Bowen did not limit himself to the practice of medicine, but was active in public affairs. In 1840 he was made presidential elector by the Whig party.

On November 19, 1857 Governor James W. Grimes officially declared that, "the Capitol of the State of Iowa to be established under the Constitution and Laws of the State at Des Moines in Polk County." There were no railroads in the state, many streams had no bridges and the river bottoms had a bad reputation, particularly Skunk river bottom and the problem of moving the state property from Iowa City to Des

Moines was a difficult one. There were four large safes to be transported, but no contractor was willing to undertake the task. Finally Dr. Jess Bowen accepted the contract and after many days of hard and tedious work the safes were delivered safely in Des Moines. The state treasurers' safe was much the largest and very heavy. During the journey it was left on the open prairie near Little Four Mile Creek in Polk County for several days and nights until the storm abated and the ground was frozen sufficient so that it could be handled on a large bob sled. When it arrived in Des Moines it was drawn by ten yoke of oxen.

In 1860 Dr. Bowen took his seat in the Seventh General Assembly as senator from Johnson county. At the breaking out of the Civil War, Dr. Bowen was Adjutant General of the state. He was afterward appointed paymaster in the United States Army and was the last paymaster to be mustered out of the service.

Dr. S. M. Ballard was born in Virginia in 1812, came from Ohio to Iowa City in 1842. He was from the Medical College of Ohio. In 1854, Dr. Ballard abandoned the practice of medicine and removed to Audubon county, Iowa, where he engaged in agriculture on a large scale.

In 1875, five candidates for governor appeared before the Republican state convention with Gen. James B. Weaver in the lead. Dr. S. M. Ballard placed in nomination Samuel J. Kirkwood. A delegate inquired by what authority the name of the governor had been used. Rising to his full height the stalwart Ballard answered, "By authority of the great Republican party of Iowa," (Brigham's history of Iowa). Thus showing how easily a doctor could set aside political tra-

ditions in the interests of public good. The nomination and election for a third term as governor insured Governor Kirkwood's election to the United States Senate.

On account of his gigantic stature and the size of his nose, Dr. Ballard was familiarly known by the title of "Big Medicine."

Dr. William Vogt was one of the most noted of early Iowa practitioners of medicine. His activities were limited to his profession. For twenty-five years he was the most loved physician in Iowa City and his memory was cherished for many years after his death in August, 1873, at the age of fifty-five years.

Dr. Vogt a native of Prussia, began practice in Iowa City in 1848. It is said that he never presented a bill for medical services, but devoted himself to his patients and his practice without thought of money compensation. His modesty, his willingness to render service, his devotion left a place never quite filled in the professional annals of Iowa City, which has been adorned by some of the noblest men in the profession of Iowa.

Dr. M. J. Johnson came to Iowa City in 1846. He was born in Jefferson county, New York, in 1815, graduated from the medical department of the University of New York. Dr. Johnson had previously practiced eleven years in Ohio. After two years practice in Iowa City he returned to Ohio.

Dr. Wm. McCormick was an early settler in Johnson county. He practiced medicine in Iowa City for a few years and about 1850 removed to California.

Dr. Nathan Udell came to Appanoose county in 1849. He was born in Susquehanna county, Pennsylvania, February, 1817. He was educated as a physician and came to Iowa as a pioneer practitioner of medicine. On April 1, 1844 the first election was held in Appanoose county at which nine votes were cast. In 1846 Centerville was laid out under the name of Chaldea but this name was not satisfactory to the citizens and at a large gathering, Dr. W. S. Manson who was an admirer of Governor Senter of Tennessee "in an eloquent address proposed the name of Senterville." This being satisfactory to the audience a petition was sent to the legislature and the name was changed, but by some mistake, the name was spelled Centerville. This is the only mention we are able to find of Dr. W. S. Manson who is said to be the first physician in Centerville unless Dr. Manson was also a preacher for it is said that Rev. W. S. Manson preached the first sermon in a log cabin on the west side of the river. (Chariton River.) In 1849 when Dr. Udell came to Appanoose county there were but few people to need his services. He was elected to the senate of the Fifth General Assembly in 1854 and in the Eighth and Ninth General Assembly. Served in the regular and extra sessions. During the Civil War, Dr. Udell was for several months surgeon of the Seventh Iowa Infantry. In 1860 he was again elected to the senate and served in the Tenth and Eleventh General Assemblies. He died in Denver April 11, 1903.

The medical history of Linn county began when Dr. Sam Grafton settled at Ivanhoe Bridge about 1840, the exact date is not known, but it is



DR. HENRY RISTINE
Born September 21, 1818
Died, 1893

stated that after several years practice he died of typhoid fever in 1847.

In 1841, Dr. Magnus Holmes came to Marion from Crawfordsville, Indiana. He was a man of high order of attainments and gave promise of a highly useful career which was soon cut short by death.

Dr. Henry Ristine, brother-in-law to Dr. Holmes came to Marion in 1842 and practiced medicine in Marion and Cedar Rapids, fifty-one years; truly a long life of service in practically the same community. Dr. Ristine sustained the closest relations to the family life of his people and as the trusted physician had opportunities to observe the elements that make up the strength and the weakness of a community.

Dr. Ristine did not seek public office, notwithstanding the temptations which must have come to him at times when opportunities for an interesting medical practice were few. His activities were wholly welfare, social and professional in character. The opportunities such as they were, gave Dr. Ristine a reputation as a surgeon which led to his appointment as chief surgeon for the Burlington, Cedar Rapids and Northern Railway and district surgeon for the Chicago and Northwestern Railway.

Dr. Ristine early recognized the need of a hospital in a growing community which had for so many years depended on home treatment for serious medical and surgical cases, and for the care of injured industrial workers, with whom he had much to do.

Hospitals at that time were in no great favor with the public generally, and strange as it may

seem to us now, such welfare institutions were extremely difficult to organize, but with the assistance of his friend, Judge Green, St. Luke's had a beginning and Dr. Ristine was made a member of the first consulting staff.

In medical societies he was a leading influence. The Linn County Medical Society was organized in 1859 and Dr. Ristine was one of the five original members. In 1873 he became a member of the Iowa State Medical Society and in 1877 was elected its president.

Dr. Henry Ristine was born September 21, 1818, near Albany, Ky. Moved with his parents into southern Indiana when two years of age. Attended Wabash College at Crawfordsville, Indiana, but did not finish the course. Graduated at the Ohio Medical College in 1851 after having practiced medicine in Marion, Iowa, for several years; having located at the latter place in winter of 1842. Was married to Miss Katherine McMaster in Crawfordsville, Indiana, in 1844, and died at his home in Cedar Rapids in 1893.

Dr. John McMaster Ristine died at his home in Cedar Rapids of angina pectoris, January 8, 1919.

Dr. Ristine was born in Marion, Linn county, Iowa, October 17, 1847. He received his literary training at Wabash College, Crawfordsville, Indiana, which institution conferred the A.M. Degree in 1908. Dr. Ristine received his medical degree from Bellevue Hospital Medical College, New York in 1876. Immediately after graduating in medicine he began practice with his father, Dr. Henry Ristine who began practice in Marion in 1842. Both father and son represented the highest ideals in medicine and surgery and for seventy-seven years the Ristines were recognized



DR. JOHN McMASTER RISTINE

Born October 17, 1847

Died January 8, 1919

as among the leading physicians and surgeons of Iowa. Soon after the location of Cedar Rapids the Ristines removed from Marion to the latter city and became identified with the building of the town and its industries, and were medical advisors to many of them. Surgeons for the Burlington, Cedar Rapids and Northern Railway. Afterwards the C. R. I. & P.; the C. & N. W. Ry.; the Illinois Central; Street Railway; Sinclair Packing House; the Quaker Oats, etc.

Dr. Henry Ristine died in 1893 and the Ristine firm was continued under the name of Ristine and Ruml. During the long period of seventy-seven years the Ristines and Ruml enjoyed a large practice among the most influential people of Cedar Rapids and their name became a household word. Dr. John Ristine continued practice up to the last day of his life. Under a mistaken idea that doctors should be rich in money and lands, Dr. John allowed the last years of his life to be clouded with the anxieties of business speculations.

A great shock came to Dr. Ristine only a few weeks before his death in the death of his son Lieut. Richard Ristine in an aviation accident at Gerstner field.

Dr. Ristine is survived by Mrs. Ristine and one son who is serving the United States Army in France.

Dr. J. F. Ely in 1847 and Dr. S. D. Carpenter in 1849 came to Linn county and were among those who became identified with the county business affairs in the decade between 1840 and 1850 and afterward. Both came as physicians and practiced for a few years with success, but soon became interested in the business and financial

affairs of Cedar Rapids and abandoned the practice of medicine. These gentlemen had an important part in the development of the city which had the good fortune to attract men of broad and liberal views, whose influence became a valuable heritage which was felt and appreciated long after they ceased to be active factors on the affairs of the city and county. Few names are remembered with greater affection than those of Dr. Ely and Dr. Carpenter.

Dr. Greenburg Ridgely Henry, son of Dr. John F. Henry, was born in Hopkinsville, Ky., September 28, 1828 and died in Burlington, Iowa, 1885. Dr. Henry was educated at Jacksonville, Ill.; graduated from the Louisville Medical College; located in Burlington in 1845. Five years later he married Miss Kate Chambers of Jacksonville, Ill. Dr. Henry, in addition to being a skillful physician was a man of business and of affairs in a broad and liberal way. He did much to promote various important enterprises in Burlington; the street railway, steam heating plant, rolling mills, etc. He was much interested in agriculture and imported the best blooded stock from his native state (Kentucky). Dr. Henry was one of the original members of the Iowa State Medical Society and was its first treasurer, which office he held three years. He was a member of the board of trustees of the insane hospital at Mt. Pleasant for several years. Dr. Henry was interested in public school affairs and for many years was a member of the school board.

Dr. R. H. Wyman was born in Oswego, N. Y., March 24, 1817. Educated at Middlebury College, Vermont and graduated from the Medical Department of the University of Pennsylvania

in 1843. Began the practice of medicine at Hagerstown, Pennsylvania, and removed to Davenport, Iowa, in 1846. In 1855 he removed to Keokuk and formed a partnership with Dr. John F. Sanford, which continued up to the time of Dr. Wyman's death in 1881, except for a brief period while in the United States Army.

In 1861, Dr. Wyman was commissioned surgeon of the 21st Missouri Infantry, commanded by Colonel Moore. On the first day of the battle of Shiloh, Col. Moore was seriously wounded in the leg, which rendered an amputation necessary. Col. Moore was placed on board a steamer at Pittsburg Landing, which had been improvised as a hospital, and Dr. Wyman as ranking surgeon had charge of the wounded brought from the Shiloh battlefield to this improvised hospital and there amputated Col. Moore's leg. Consequent on the fatigue and exposure from this service, Dr. Wyman contracted pneumonia and from the protracted illness which followed he was invalided home, and in June, 1862, he resigned from the service and resumed practice in Keokuk where he died in 1887.

Dr. Asa Horr was one of the most distinguished and probably the most scholarly of early Iowa physicians. He located in Dubuque in 1847. Dr. Horr was born in Worthington, Ohio, September 2, 1817. He early showed a strong interest in science and perhaps contributed more to scientific literature than to medical literature. He was not without skill and courage in surgery. In 1875 he removed a large solid tumor of the left ovary together with a fibroid tumor of the uterus at the same operation. It is stated that there were many adhesions and that the tumors

were removed with great difficulty. The patient made an uneventful recovery. Dr. Horr performed many difficult operations such as were regarded as legitimate in those days.

Dr. Horr was an active member of the American Association for the Advancement of Science, and was one of the leading observers for the Smithsonian Institute. His most valuable contributions were to Meteorology and to him and Professor Lapham of Milwaukee is due the present method of forecasting the weather employed by the United States Government. Dr. Horr died at his home in Dubuque, June 2, 1896, at the age of seventy-nine years.

Dr. S. E. Reinhart a graduate from Jefferson Medical College came to Oskaloosa in 1846. When the Mahaska County Medical Society was organized in 1856, Dr. Reinhart was elected its first president. It does not appear that he at any time occupied public office, although well fitted by ability and education, but preferred to remain a devoted practitioner of his profession. He was a cultivated gentleman, enjoying the confidence of the public and the affection of the medical profession of his county. He died of pulmonary tuberculosis in 1875.

Two other physicians came to Mahaska county about 1845. Dr. John J. F. Hopkins who later was surgeon of the 33rd Iowa Infantry and Dr. F. W. Coolbridge, both graduates of reputable medical colleges and a Dr. Owen who was not a medical college graduate.

Dr. Edward Whinery (by some the name spelled whinnery) was one of the pioneer physicians of Iowa. He settled at Fort Madison and began practice there in 1841. He was born on a

farm in Columbiana county, Ohio, February 27, 1812. His mother was Margery Carroll. She and her sister, Sallie Carroll married two brothers, William and James Whinery. Edward Whinery was the eldest of nine children all of whom grew to adolescence. Four of his five brothers reached ages ranging from eighty-four to ninety years. Edward was the strongest of them all, and but for his death by accident, so all his brothers were wont to say, would have outlived them all. In that early time, the unworn Ohio soil yielded forty bushels of wheat to the acre. Most of the acres were still in oak, poplar, sugar-maple, shell-bark hickory, etc. The "cradling" of the wheat was the heaviest work known. At sixteen no man in that region could keep up with Edward, "cradling."

The Whinerys were Quakers. In 1829 when Edward was seventeen, occurred the schism between the Hicksite and Orthodox Quakers or Friends. He alone, in a dispute over the possession of the meeting house of New Garden meeting, ejected all the Orthodox members, for which violation of Quaker ethics, he was compelled or impelled to profess sorrow to the Hicksite "meeting."

In 1831-32 he studied medicine with his uncle, Dr. Thomas Carroll at Cincinnati and at Maysville, Kentucky. One of his grandmothers was a Murray, the other a McMillan.

Edward Whinery was known as a skillful and daring surgeon. Exceedingly slow in movement, but completing an operation with the rapidity that often characterizes the slow and sure. He was five feet eleven inches in height, and powerfully built. It was his custom to care for the up-

per park at Fort Madison, opposite his home which he would mow with scythe. Although constantly driven by a large though not lucrative practice his lack of business ability was as conspicuous as his professional skill was memorable. In the supposed flush time of gold at a premium, he habitually charged \$1.50 per visit. During the Civil War he was prominent in relief work and generally made no charge to the families of absent soldiers, sometimes in cases where the beneficiary was better off in money than himself. His oldest son, Marshall, was a Union volunteer, who later became a physician, dying in 1887 in Wisconsin.

The brothers in Ohio remained Garrison abolitionists, refusing to vote in 1860. Though vehemently anti-slavery, Edward was an active supporter of Lincoln in 1860 and also active in previous years.

The large residence on Third street, Fort Madison, later owned by Mrs. Kretsinger, the prison contractor, was completed by Dr. Whinery in 1860 (a portion of it many years older) and was long a monument of his mastery of detail and thoroughness. It was superintended in every item by him, and was built to endure, projected to collect debts, a business error now well understood. It left him farther in debt than before. His great strength made him over confident, he drove a dangerous horse, and early in February, 1868, he was thrown from his buggy, landing on his head on the frozen ground. Confident in the "purity of his blood," he took care of his own wounds which healed too rapidly. About a week after the accident he crossed the Mississippi river on the ice to visit a patient whose leg he had am-

putated, a relapse ensued and when Dr. Harvey of Burlington and Dr. Cutler of Keokuk were called erysipelas had set in and they told him to prepare to die. He died February 25, 1868.

The explosion of a steamboat off Nanvoo provided a notable case for him from the public if not from a professional standpoint. In 1911 two beautiful chestnut trees forming one symmetrical top that Edward Whinery had planted as a boy in 1825 on the old Ohio home farm, were struck by lightning, and wrecked, dying.

The above interesting biographical sketch of one of the strong men of early Iowa was written by a son of Dr. Whinery, whom after considerable search, we found in Oakland, Calif. In looking over the published records of the Iowa State Medical Society, we found the report of a case read by Dr. Whinery on the sixth day of February, 1868, at Des Moines, nineteen days before his death. We reproduce the report in full. It is interesting to know the characteristics of a man of courage and resourcefulness who could under the most unfavorable conditions undertake an operation which would today be regarded as a surgical victory in the best equipped hospital.

On the 28th day of March, 1865, at 8 o'clock a. m., I visited Mrs. S., of Niota, Illinois, a healthy Irish woman about thirty-seven years of age, who, I was told was taken in labor about 10:00 o'clock a. m. on the 27th. The first indication she had of approaching labor was the escape of the waters, soon after which regular labor pains supervened, and an ignorant mid-wife was summoned to attend her. Labor progressed regularly until about 7:00 o'clock in the evening when it was expected the child would be born in a few minutes. She was seized at that time

with severe burning lacerating pains, or stitches, as she called them, throughout the abdomen, and the expulsive pains ceased. I found her sitting in a chair, leaning forward at an inclination of about forty degrees, and very unwilling to change her attitude. Her pulse was a hundred and ten, irregular and fluttering; the countenance very anxious and pale, the skin cool and clammy. It was with difficulty I could induce her to assume a position convenient for me to make an examination per vaginam. I caused her however, to be held at an inclination of about forty degrees and passing the digital finger of the right hand into the vagina and the left hand over the abdomen, I found the head of the fetus resting well down on the perineum, but by pressing firmly with my finger against the head, it ascended above the superior strait, and the whole body could be distinctly felt through the walls of the abdomen, she being of spare habit. The motion thus given to the fetus, very much increased the lacerating pains, and she cried out, "These stitches will kill me." My diagnosis was rupture of the uterus, and I informed her and her friends that her condition was very precarious. The mid-wife tried to give her "Muterkorn Thee" (ergot), but the stomach would not take it. The night was very dark and the husband and his friends were afraid to attempt to cross the Mississippi river in a row boat, as it was very high with much drift wood floating; she therefore spent the night in applying new corn whiskey to the abdomen.

I allowed the patient to assume the attitude first mentioned, returned home for my instruments and an assistant, Dr. J. C. Blackburn accompanied me. At 10:00 o'clock a. m., when we arrived, no change had taken place in the patient. My friend Dr. Blackburn thought, from the visible and physical appearances and my representations of the case, that my diagnosis was correct, and we soon agreed upon the propriety on making an abdominal section. Dr.

Blackburn administered the chloroform while I was preparing other matters. We placed the patient on her back on a table, and I made the incision on the right of the umbilicus, about six inches in length, through which I removed a large male child (dead of course), and the placenta, both being entirely above the uterus, which was contracted down into the pelvis. There was very little appearance of hemorrhage. The rupture was in the fundus from the anterior to the posterior wall. The edges of the wound were now brought together by sutures of silk, taking care to include all the structures except the peritoneum; then finishing the dressing with adhesive straps, a compress and a wide bandage. The operation and the dressing were performed in less than five minutes, and the patient placed in bed, still under the influence of chloroform. When she recovered from its effects, she expressed herself as feeling quite comfortable and grateful for her delivery from her intense suffering for so many hours. We expected peritoneal inflammation to supervene, but in this we were happily disappointed.

I visited her on the 29th, and found her comfortable; the pulse had gone down to eighty, and every symptom was favorable; the lochia was moderate in quantity; she had been nearly free from pain and slept well during the night, though she had not taken any morphia and quinia powders left for her, in case irritation and debility set in.

March 30th and 31st continues without an unfavorable system.

On the 3rd of April, she sat up three or four hours in bed. The wound had healed by first intention.

On the 5th, I took out the sutures and continued the adhesive straps, the compress, and bandage; she was then dressed and sitting up.

On the 8th, the lochia ceased and she went about her ordinary housework.

Dr. Edmund Augustus Boyer was numbered among those who were truly pioneers of Mahaska county, and his name will ever be held in grateful remembrance by all who appreciate what the pioneers had to undergo to make the wilderness a happy home for civilized man. Dr. Boyer was a native of Uniontown, Md., born March 31, 1816. At the time of his birth, and for some years afterward, his father, also a physician, was the owner of a number of slaves, but becoming convinced that slavery was a crime, and not wishing to rear his family where they would be surrounded by such evil influences, and where they would be dependent upon others, he liberated his slaves, after liberally providing for them, and moved with his family to Ohio. Here the Doctor grew to manhood and entered the medical profession.

In 1840 Dr. Boyer was united in marriage with Miss Mary Wiley, of West Lake, Ind., but a native of Vermont, and immediately moved to Iowa, locating in Van Buren county, where he remained three years. In April, 1843, he came to Mahaska county, picked out his claim, and in May following, just as soon as the country was thrown open for settlement, moved his family here, becoming one of the first, if not the first, permanent settlers of the county. Dr. and Mrs. Boyer reared a family of nine children; Mrs. Dr. Scott, Mrs. John R. Barnes, Oskaloosa; Mrs. E. B. Young; William E. Boyer; Richard M. Boyer; Frank D. Boyer; Edmund A. Boyer, Jr.; Fannie, wife of Smith McPherson, the distinguished attorney general of Iowa and later Federal judge for the southern district of Iowa, and Thomas H. Boyer.

Dr. Boyer practiced medicine fifteen years,

when he retired from active practice and devoted his entire attention to his farm and store. He was a close reader and had a deep insight in matters of general and public interest. While a zealous politician he never sought public affairs or position.

In early life Dr. Boyer was identified with the Whig party, but being strongly prejudiced against slavery he joined in the organization of the Republican party of which he was an active member until he believed that the Greenback Labor party more truly represented the interests of the people when he became an active member of the new political organization and worked in its interest as he had in the earlier days of the Republican party. Strong in his political views he made both friends and enemies, but all respected him as a man of sterling worth, true to his friends, kind and provident to his family, and always ready to extend a helping hand to the unfortunate. For nearly half a century he was a resident of Mahaska county. Every change that was made in transforming the wilderness into a thickly settled and prosperous country, he witnessed and participated in. The home which he founded was a hospitable one, and from it have been sent forth some who occupy useful and honorable positions in town, county and state. Dr. Boyer, after an illness of more than a years' duration, died February 5, 1886, at his farm in Scott township, on which he first settled when he came to this county.

A group of pioneer physicians located in Washington county between 1840 and 1850 whose names do not appear in the records of Iowa history, but are worthy of record.

Dr. Samuel Nealy located in Washington

county in 1840. He was a graduate of Jefferson Medical College and served as a surgeon with the American forces in the war of 1812. He died in Washington county in 1871.

Dr. Cleaver and Dr. Lefler came to Washington county about 1840. The former moved to Columbus City where he died about 1860 and the latter died in Washington, Iowa, 1843.

Dr. W. H. Rousseau was born in Kentucky in 1816, came to Washington in 1844, read medicine with Dr. W. B. Stone. Later graduated from the College of Physicians and Surgeons, Keokuk; married Electa Atwood in 1845. Practiced in Washington until his death in 1893.

Dr. Wm. McClelland came to Washington in 1845 and Dr. O. H. Prizer came to Brighton in 1845. Dr. McClelland is said to have introduced Fowler's solution in the treatment of malarial fever on account of the high price of quinine.

Dr. Horace Carley located in Brighton in 1839 and died the same year.

The medical history of Louisa county has many features of interest. As early as 1852 a county medical society was organized with J. M. Robertson as president. Dr. Robertson was one of the most distinguished of Iowa's pioneer physicians. Dr. G. W. Taylor was its first secretary. Other prominent members of the society were Dr. H. T. Cleaves and Dr. John Bell, Jr.

Dr. John Bell, Jr. practiced medicine in Wapello for several years and removed to Davenport. Some years later he moved to Dallas, Texas, where he died in 1888 and was buried at Wapello. Dr. Bell was at one time surgeon general of Iowa. During the Civil War served as surgeon of the Ninth Iowa Cavalry. Was chief surgeon on Gen-

eral Hunts' staff. Served also as U. S. A. medical director, Department of Texas. He was a member of the American Medical Association. Dr. Bell was particularly noted as a skillful surgeon, as surgery was known at that day; was fearless in surgical undertakings where the interests of the patient were concerned; one operation in particular attracted much attention: On Christmas day, 1854, Dr. Bell was called to see L. W. Bates who had swallowed a bar of lead in undertaking a slight of hand performance while in a partially intoxicated condition. The bar was ten inches in length and weighed nine and one-half ounces. After observing the patient for ten days and being satisfied that the bar was in Bate's stomach, Dr. Bell with the assistance of Drs. J. M. Robertson, Cleaver, Graham and Taylor made an abdominal section, exposed the stomach which was drawn into the wound, opened and the bar removed. The wound in the stomach was closed by interrupted sutures, returned into the abdomen and the external wound closed by interrupted sutures supported by adhesive plaster (presumably without drainage). The sutures were removed on the seventeenth day. The patient made an uneventful recovery. The operation consumed twenty minutes.

The case was first published in the Iowa Medical Journal for April, 1855 and in the Boston Medical and Surgical Journal, January 2, 1860.

Dr. T. G. Taylor, Dr. J. B. Latta, and Dr. B. G. Neal began practice in Louisa county prior to 1850. Dr. Taylor does not appear to have been a graduate of a medical college but was a successful practitioner in Wapello until he removed to Muscatine where he died in 1887 or 1888.

Dr. Latta was born in Ohio, November 26, 1823, graduated from the Ohio Medical College in 1849 and located in Grandview, Iowa, the same year. He later moved to San Diego, California, where he died November 26, 1896.

Dr. B. G. Neal located in Columbus City in 1848 or 1849 and practiced without a medical diploma until 1856 when he received his medical degree from Rush Medical College. Dr. Neal early in 1860 near Columbus City performed a Cesarean Section: the first it is said ever performed in this section of Iowa.

Dr. Hiram Thomas Cleaver should be enumerated as one of the best known and respected among Iowa's pioneer physicians. His connection with the Keokuk College of Physicians and Surgeons brought him in close relation with a large body of medical students who remembered Dr. Cleaver with great affection.

Dr. Cleaver was born in Centerville, Washington county, Pennsylvania, February 17, 1822. His parents were consistent members of the Society of Friends. He graduated from the New Lisbon Seminary, New Lisbon, Ohio in 1841 and graduated in medicine from the College of Physicians and Surgeons, Keokuk in 1862 and from Chicago Medical College in 1872. It appears that after graduating from the New Lisbon Seminary, Dr. Cleaver entered the office of Dr. T. Green of New Lisbon and after a period of pupilage under his preceptor according to a custom quite common in early days, he entered into a partnership with his preceptor and practiced with him several years, and finally received his diploma from Keokuk when he was elected professor obstetrics and diseases of women. In 1848 Dr. Cleaver came

to Wapello where he remained in the practice of medicine fourteen years when he moved to Keokuk. While a resident of Wapello or from 1854 to 1858, Dr. Cleaver represented Louisa county in the Iowa Senate. He was one of the founders of the Louisa County Medical Society. Was a member of the American Medical Association and in 1874 he was elected president of the Iowa State Medical Society.

Dr. Cleaver in 1887 on account of poor health, removed to Las Vegas, Hot Springs, New Mexico. Soon after he was appointed surgeon to the Atchison, Topeka and Santa Fe Ry. Co., which position he held at the time of his death, January 11, 1888.

Dr. John Elbert was born in Fleming county, Kentucky, May 16, 1806. At the age of six years he removed with his father Dr. J. D. Elbert, senior, to Logan county, Ohio, then almost a wilderness, and when hostile bands of Indians exercised a power all but agreeable to the new settlers, who imperiled their very existence by day and night, that the present generation might enjoy peace and tranquility.

At this time the war of 1812 broke out, and Dr. Elbert, senior, tendered his services to the government in the capacity of physician and surgeon, rendering effective service in the army, while the young boy remained at his father's cabin to assist as best he could in the protection of the family. The education of Dr. Elbert was such only as the common schools of the neighborhood afforded. Nothing daunted by the limited means and meagre facilities for the acquirement of knowledge in that region of country, he resolved to be a man of mark, and accordingly

availed himself of the books of his friends, who were more fortunately circumstanced. In 1829, he received a license from the hands of Dr. Daniel Drake of Cincinnati, after which he established himself as a practitioner of medicine in the State of Ohio, where he pursued his profession with great energy, until the year 1840, when he sought the then far west, a field affording greater latitude to his boundless ambition, which was not restricted to the profession alone; his influence was felt at an early day in the councils of the territorial legislature to which he was elected in 1842, and of which he subsequently became president, likewise, in all matters pertaining to the development of the agricultural interests of the state, was a devoted member of the Masonic fraternity, as well as a shining light in the Methodist Episcopal Church. His indomitable will, coupled with confidence in the recitude of his intentions, made him generally efficient and successful in carrying to completion the varied projects which he originated, an element in his character to which was due his eminence as a practitioner and surgeon.

In addition to the license from the Cincinnati college, two honorary degrees were conferred upon him. One by the faculty of the Missouri University, and one by the trustees of the University of Pennsylvania. As a surgeon, he acquired extensive reputation in southern Iowa and northern Missouri, for the bold use of the knife, as well as skill in general management. By his patients he was especially beloved for his prompt attention and kind sympathies. In his friendships he was ardent and wholly disinterested,

never counting the cost when he could oblige a friend. Hospitality was his crowning virtue. Nothing afforded him greater delight than congenial company about his table or fireside. His jovial nature and seemingly inexhaustible fund of anecdote, conjoined with a character and manner so eccentric, made him wonderfully entertaining, while his laughter-provoking originalities were a source of much surprise to his friends, who could never really anticipate him. In the review of his many virtues and excellencies of character, we have forgotten to record his faults. If he had any they should be ascribed to his eccentricities.

Dr. Elbert died at Keosauqua, Van Buren county, Iowa, on the 28th of March, A. D., 1865, after an illness of three weeks. His brethren of the Masonic order, together with a vast throng of his brethren in the Lord, performed the last sad rites and solemn services of religion, in a manner befitting his name and fame, and in silence deposited his remains beneath the cold clay from whence it sprang.

Dr. McGugin was born in West Middleton, Washington county, Pennsylvania, in the A. D., 1807. Acquired his literary education under Alexander Campbell, after the completion of which he commenced the study of his profession, under the supervision of Dr. Andrews, an ancient medical gentleman of Steubenville, Ohio, and graduated at one of the oldest medical schools of the country—the medical department of the University of Maryland, at Baltimore. In western Pennsylvania he entered upon the practice of his profession about the year 1829. Was married to the daughter of William Welsh, esq.

of Washington county, Pennsylvania. In the fall of 1837 with his wife and daughter, he emigrated to Knox county, Ohio, where in consequence of feeble health, he located on a farm in the vicinity of Mount Vernon. In 1840, 1841, he represented the county in the legislature. He afterwards removed to the town of Mount Vernon, devoting his energies to the practice of his profession until the Mexican War broke out, when he was appointed surgeon in the army, in which capacity he served with marked ability. At the close of the campaign, he returned to Ohio, and, with others, emigrated to Keokuk, Iowa, at the time the medical department of the State University was being organized. He was selected as one of its professors, and continued his association with the institution as professor and as president of the faculty up to the date of his death. As one of the editors of the Iowa Medical Journal, he labored unceasingly for the promotion of the profession. He was a member of the board of directors of the insane hospital of Ohio, and afterwards in our own state. Served several years as president of the board of health of the City of Keokuk. Politically, the Doctor was a great enthusiast, a faithful follower of the teaching of Jefferson, and an admirer of Jackson. In the presidential contest of 1860, he was one of six who voted for John C. Breckenridge, who was his beau ideal of a statesman.

When the tocsin of war resounded throughout the land, the voice of Dr. McGugin was heard in favor of conciliation and compromise. Many months after the inception of the Rebellion, his conviction underwent a radical change, and he veered to the opposite side, keeping step to the

music of the Union. In 1862, he accepted the appointment of surgeon to the 3d Iowa Cavalry, and after the battle of Pea Ridge was transferred to the military hospitals in St. Louis, in consequence of failing health. At the urgent solicitation of a host of friends, he resigned his position, and returned to Keokuk to recover his lost energies. Having regained his health, he reluctantly consented to assume charge of the Leighton House Hospital, which he conducted with marked skill and ability until his system became thoroughly impregnated with mephitic poison from wounds and other sources. When his vitality was fast ebbing away, he consented, at the instance of his medical friends, to relinquish his charge and devote a few hours to the resuscitation of his failing powers. A condition of asthenia supervened however, before plans were perfected for a short travel, from which he never rallied. It was the pleasure of his biographer to see him often in his last hours, and render to him what comfort he could to smooth his way to the grave, for which he was more than grateful. Naturally of a delicate, nervous organization, it was a matter of surprise to his friends to observe his remarkable equanimity of temper; amid all his sufferings his mind remained clear to the last. He conversed freely about the future; he believed in the Bible, and calmly submitted to the Divine will. A few days before his death, he asked the writer to open the window, exclaiming: "That I may once more gaze upon the blue sky, and contemplate the beauties beyond."

On the 23rd of June, 1865, at 11:30 o'clock, he died. His place in the profession which he adorned, in the literary and social circle, cannot

readily be supplied. His ability was universally acknowledged. His reputation by no means circumscribed. His usefulness and activity as a contributor to the literature of the profession will be disputed by none, indeed, he loved to discuss the intricate parts of medicine and with great skill in the adaptation of his inexhaustible vocabulary, would expound the most abstruse theories, and render them so clear that controversy was, in fact, ridiculous.

He was never better pleased than when expatiating upon the beautiful theory of the capillary circulation upon the blood. Whether in the presence of the august national society, or in the halls of the university, he labored purely for the advancement of science, and the overthrow of everything pertaining to irregular medicine. On the ethics and dignity of the profession he was truly eloquent, and be it said to his honor, that he practiced religiously what he preached. If he excelled, in any particular, his professional brethren, it was in that of a correct diagnosis of disease, securing to him a wide fame as consulting physician; this power was not intuitive, but due to the thorough manner with which he was accustomed to investigate disease. His scholastic attainments were of the finest order. His modes of thought full of originality. As a practitioner, conscientious and skilled. As a teacher, versatile, earnest and enthusiastic. As a man, sincere, and full of benevolence; sacrificing his own comfort in this desire to benefit his fellow men.

The last solemn services were conducted in the Methodist Church, of which, Mrs. McGugin was a member. His brethren laid his remains quietly beneath the sod, while the multitudes stood

around to witness the last honors paid to a man whose memory will not rot in the tomb.

John W. Finley*, M.D., was born in Lincoln county, N. C., June 15, 1807. He was the son of James and Mary Finley, who while he was yet a child removed to Kentucky, and subsequently to Pike county, Missouri. Here he grew up engaged in the ordinary labors of the farm; attending the common schools of the country during the winters, until he was about twenty-three years of age.

He then went to Jacksonville, Ill., to an institution under the charge of Dr. Edward Beecher, where he remained a little more than a year. Soon after leaving there he commenced the study of medicine with Dr. Wm. C. Hardin, of Louisiana, Missouri, and continued for two years. In 1834 he went to Cincinnati, Ohio, to attend medical lectures, and entered the office of Dr. S. D. Gross, then demonstrator of anatomy, being, as Dr. Gross said, the first office student he ever had. Here he remained for two years, graduating in the spring of 1836.

The same year he came to Dubuque, where he immediately entered upon the practice of his profession, which he continued untiringly and without interruption, for thirty-eight years (except an absence of two and a half years in the army). During the early years of his practice the country was new and sparsely settled; the resident physicians were few and far between; many of the roads were mere trails or bridle-paths, and those designed for wheels were usually impassable during the spring and fall, permitting only traveling on horseback; consequently for many years he

*The biography of Dr. Finley would have appeared in the first number, but for an error in the date of this manuscript.

traveled almost entirely in this manner and during the prevalence of malarial fever in the fall, and pneumonia in the winter and spring, he was frequently almost continuously in the saddle; often called long distances to the vicinity of Colesburg on the northwest, to points in Delaware county on the west, into Jones and Jackson counties on the southwest, not infrequently traveling from sixty to seventy-five or eighty miles on a single trip; enduring fatigue and performing labor that few men could have borne up under.

In June, 1844, he was married to Miss Helen Coriell, a daughter of one of the early settlers of Dubuque. The winters of 1851 and 1852 he spent at Louisville, Kentucky, in attendance upon lectures, for the two-fold purpose of rest and improvement; renewing again his acquaintance with Prof. S. D. Gross, towards whom he ever felt a grateful friendship. At the close of the course he returned to Dubuque and resumed his practice which continued to increase. For some time previous to 1840 he was associated in business with Dr. Crane; from May, 1855, to March, 1856, with Dr. C. W. Belden; and from the fall of 1856 to the spring of 1861 with Dr. Tom O. Edwards. From 1857 to 1859 he was the senior member of the banking firm of Finley, Burton & Co., who about the same time established and operated a white lead factory. They withstood the financial pressure of those years longer than many others, but the decline and shrinkage of values, especially of real estate, at length compelled them to suspend. At that time, beside his liability as a member of the firm of Finley, Burton and Co., he had somewhat extended personal liabilities; these he promptly secured with his

private property, and ultimately paid to the last dollar with interest.

After the breaking out of the Rebellion, Dr. Finley felt an earnest and increasing desire to enter the military service, and October 1, 1862, he was very appropriately appointed surgeon of the 37th Infantry (the Iowa Grey Beards), and served faithfully until it was mustered out at the close of the war, when he returned to Dubuque and resumed practice with Dr. Joseph Sprague, which partnership continued until nearly a year after the latter became disabled in May, 1873.

In August, 1856, he was thrown from his buggy, his head striking the curbstone, receiving severe injuries. From the immediate effects of these injuries he suffered several months, but, with that restless energy peculiar to him, he resumed attendance upon his old patrons in spite of pain and suffering. Soon after, embarking in the extensive business operations heretofore referred to. These with the attendant misfortunes, the anxiety arising therefrom, and the labor of an extensive practice, undoubtedly contributed largely to develop the changes that finally terminated his life. He continued to practice as his strength and sufferings would permit until the spring of 1874. In September of that year he visited Philadelphia to consult his old friend, Dr. Gross, but without receiving any permanent benefit. He suffered severely during the following winter, and in June, 1875, he visited California spending a short time in Utah, hoping by a change of scene and a milder climate to stay the progress of his malady.

He remained through the winter, spending part of the time at Los Angeles, returning to Dubuque

in March, 1876, realizing but little or temporary benefit from his journey. His disease progressed steadily, causing a gradual loss of control of his will, an impairment of memory, especially of recent events; at times a loss of ability to walk. During July he failed rapidly, and sank August 3, 1877.

In personal appearance Dr. Finley was six feet two inches in height, a spare, stooping figure, yet a man of marked appearance and of equally marked character. Without the aid of those personal attractions which are supposed to be so valuable to the successful popular physician, and none of the elements that enabled him to assume that mild, yielding character that can conform to every influence, and be all things to all men; none that go to make up the plausible fawning sycophant. On the contrary, he was reserved, retiring, and at times so abrupt that strangers thought him curt, unresponsive, and even irritable; he appeared ever courteous and kind to those friends and acquaintances who knew him well.

With his patients he possessed a personal magnetism which combining with his kindly feeling, his earnest sympathy and untiring diligence, gave a hold upon them that few can equal, and yet fewer can excel. In his relations to members of the profession he was ever open, cordial, and honorable. Always careful and scrupulous to avoid interfering with the rights or patients of other practitioners; keenly sensitive to his own rights in this respect, he would be a party to no contest but would promptly abandon any patient where there was an apparent probability that he was not entirely acceptable to the patient and immediate friends. In consultation he was courteous and

judicious; cautious and unobtrusive in the expression of his opinion; when sought, it was given with an unassuming but cordial freedom, that while it gave additional weight to his endorsement, yet carefully avoided reflecting upon any who might disagree with him.

To the young practitioner he was unassuming and friendly, he watched him closely, and if the verdict was favorable his endorsement was ready, cordial, and free; if not, he quietly abstained from any expression of opinion; censoriousness being entirely foreign to his character. He had long been a member of the Dubuque County Medical Society, but took no active part in its proceedings. He joined the Iowa State Medical Society at its meeting in Dubuque in 1860, but took no steps to retain or renew his membership.

As a business man he was cautious and careful; as a citizen he was ever ready to encourage and assist whatever he thought was for the public good, casting his influence on the side of morality and religion.

Possessing strong convictions and forming decided opinions, yet wanting those strong impulses that would prompt him to present them forcibly, or urge them upon others. He was deficient in the essential elements of a leader, and by some was unjustly regarded as lacking public spirit.

Ever regular in his attendance upon and support of the Presbyterian Church, and a believer in its doctrines, he did not make a public profession of religion until the last year of his life. Generous and kind in his professional intercourse with the deserving poor; systematic and conscientious in his benevolence, yet so averse to ostentation and display in giving that he took spec-

ial pains to conceal his charities, practically illustrating that teaching of scripture, not to allow his left hand to know what his right hand did. As a whole his life and character were above the average in usefulness and success. With only such advantages and opportunities as are within the reach of the humblest in the land, he sought the frontier, and by a career of persevering labor and self-denial secured a position and exerted an influence that are alike commendable and honorable, leaving the memory of a life fragrant with kind acts and good deeds that will long survive him.

MEDICAL EDUCATION IN IOWA

PART THIRD

Thirty years elapsed from the appearance of Dr. Muir, an army surgeon on the Iowa side of the Mississippi, to the period when the first institution for teaching medicine was organized in Iowa. Dr. Muir was not particularly identified with civil practice, but to some extent with territorial affairs. During the period referred to, a small number of well trained physicians came to Iowa and became impressed with the idea that the time must come when some provision for the education of medical practitioners should be made to meet the growing needs of the Iowa country. Medical schools had as yet only reached a rudimentary stage of development and young men of very limited general education were admitted to their courses. The early schools were organized for the laudible purpose of preparing men to supply certain recognized needs in a sparsely settled country.

It may be true that at a later period, schools were organized for more selfish purposes and that the personal interests and ambitions were better served than the general public. Student fees, and the title of professor had attractions no doubt, and were responsible for the multiplication of medical schools which came later.

The above criticism does not apply in any great degree to the pioneer Iowa medical college, which finally found a permanent home in Keokuk and which was destined to become the medical center of Iowa for many years.

The College of Physicians and Surgeons of Keokuk was organized in La Port, Indiana, in 1846. Who constituted the first faculty we do not know except that Dr. W. W. Mayo who later became so widely known in Minnesota, was professor of chemistry. In 1847 this school was moved to Madison, Wisconsin, and became the medical department of the University of Wisconsin. For some reason not clear now the school migrated to Rock Island in 1848 to become the "Medical College of the Upper Mississippi." In 1849, Davenport offered greater inducements and was the center of medical education for one year. For some reason at the close of the 1849-50 session at Davenport, the school finally moved to Keokuk to begin its first session in November, 1850, where it remained for a period of fifty-eight years. In 1908 the Keokuk Medical College merged with Drake, which in turn, five years later merged with the Iowa State University, School of Medicine.

The most interesting period in the history of this pioneer institution of medicine is in its early days at Keokuk. The city of Keokuk in itself has a history unique and interesting in Iowa, quite different from the rather common place and uneventful settlement, growth and development of other cities in the state.

The medical student of today has but small appreciation of the medical college of his father and grandfather. Today the microscope, the test tube, the clinical laboratory and the clinic room, the x-ray, electrocardiograph, phthalin and other tests for kidney functions, the blood-pressure tests and many other things occupy the students attention for four years, after a preparatory

course of equal length. In the fathers, or it may be the grandfather's day, eloquent lectures on the liver or on the action of opium would hold the attention of the student for the hour. Today after the professor has applied all the instruments of precision, there is still room for doubt; not so then. After an eloquent discourse on what could not be seen or felt, but by a process of logical reasoning from an unknown premise, the professor could with refreshing certainty, present the exact condition and formulate a combination of drugs which rarely failed to find the diseased tissue and work a happy result.

Let us listen to the introductory address of M. L. Knapp, M.D., president and professor of materia medica and therapeutics in the Medical College located in Rock Island, Ill. (A verbatim copy, not a punctuation mark changed.)

"No honor could be more congenial to my feelings, for since enduring some fifteen years of toil in the profession in Illinois and having held communication with several medical schools to find myself at last in this 'El Dorado' of the flowery West, on the banks of a lovelier than the Blue Moselle, presiding as acconcheur at the birth of a new institution of medical learning, pure, promising and undefiled by perfidy, comely in every feature and limb, matchless, indeed, at her birth, is, to me, a source of more unalloyed happiness than I could enjoy were I elevated to the chief magistracy of a state.

"The faculty herein associated for the purpose of teaching medicine, derive their powers, privileges and appointments from the Madison Medical College, an institution chartered by the sovereign State of Wisconsin and possessing as full

and ample powers for conferring degrees in the profession of medicine as any institution in the United States. A power is granted in said charter to create a branch, which power was exercised by the corporators at their meeting for organization, and the branch was located at Rock Island, and styled the Rock Island Medical School. This was done to give a central position and not to interfere with any school already in operation. Discretion was here considered the better part of valor.

“New schools are looked upon with a jealous eye, and their projectors are frequently made the target at which bad eggs from other schools are hurled. I have some reputation in this way; am a new schoolsman; have associated in getting up several; was a private at the late lamented McClelland, who got up Jefferson College and sundry other medical schools in Philadelphia, and who abused and vilified and conspired against by his envious rivals, some of the very men we opine, who now enjoy the fruits of his labors. I have had early lessons and have had late lessons and only wish I were indeed a more worthy pupil of so worthy a master.

“What I wish to say is to define our position—declare our bill of rights. We hold it to be essentially our inherent and unalienable right to do just as we please, to get up a school on Rock Island or on Nantucket Island, on the Rocky Mountains or in the city of Gotham, or at any place between—among our neighbors the Flat Heads or among the High Heads whose facial angle comes up to the standard of our own—and having established it we have the unquestionable right to teach the doctrines of the Flat Heads for

true physic, but the posted up doctrines of the fathers, seasoned of course with the salt and sage of our own experience to make our lessons sit well on the stomachs of students; and should the smoke of our incense rise and curl more gracefully than that from some other wigwam, or in other words the offering of our firstlings prove more acceptable like Abel's of old; we hold that no wicked, envious brother Cain should rise up and slay us outright with a paltry paper pop-gun; commit the horrid crime of fratricide and get a mark set on himself for life; yea verily, we hold that we have the inalienable right to do so as we please, albeit, in those times of reform in medicine we shall please to be found practically regarding all the reforms and usages of the enlightened and progressive age of medicine in which we first draw our birth; as a matter of principle, in the first place because we wish and please to do right; and as a matter of policy, in the next place to present ourselves from being read out of the church as soon as christened. Other schools are reforming—we wish to start right and to be in communion with some. We have not taken our stand, be it understood in this far out, dark and be-nighted corner of the world, where hardly a rushlight sheds its feeble ray, in order to be an outlaw and carry on a border warfare with our neighbors the Sacs, Foxes or Pottawattomies, or any other tribe of Indians or white men, school or professors who may have claimed this as a portion of their stamping ground, and raised the warwhoop, brandished the tomahawk or issued anonymous scurrilous circulars. We war not with them. Let those who make asses or Indians of themselves who will,

and incur the just censure of public opinion. We have too much self-respect, and too abiding a sense of what belongs to good manners and the proprieties of civilized life, to retaliate or even to respond. Not that our border foes are less vulnerable than border hordes in general, but our ambition runs not in this vein; runs not thus low.

“If we cannot devote ourselves to some higher purpose than a loathsome effort to inflict injury, let us and our cause be doomed to degeneration. But ours is a nobler object; a broad effort to do good. And our mission, be it known is one of peace, order and good will to all men, to whom these presents shall come or may in any wise concern. We intend to be strict conformists to law, human, medical and devine; to set a good example to all professors and the rising generations of doctors; to treat our friends with true friendship; our foes with extraordinary, even Parisian politeness and the more so the more they abuse us, the Journals and Reviews, with our thanks and patronage whether they notice us justly, unjustly or not at all; our Indian neighbors as though we wished to civilize and Christianize them; students of medicine with sound doctrine, line upon line and precept upon precept; and to continue to treat all mankind with gentleness and charity when well, and with the best of our skill and physic when it is their good fortune to employ us when sick. We intend to continue to pursue an honorable course in all things; in teaching or fighting, whatever others may do, and to take Dame Fortunes’ favors with laughing good humor, though some few of them may come through tainted channels. We mean especially to keep up with our noble profession as closely as

possible and continue to teach it; and we intend to abet all consistent reforms."

We have not been able to trace the subsequent history of this learned medical teacher and college president. It does not appear that he continued his connection with the school after it moved to Davenport.

The history of the school in 1849 when located in Davenport was apparently uneventful. The only reference we have been able to find aside from the fact of the school conducting a course of lectures for one year, is in the autobiography of the distinguished jurist, John F. Dillon who entered the Rock Island school in 1848 and graduated from the school in Davenport on 1849-50. Judge Dillon says, "the professors as a body, were able men, some of them men of great learning and even genius. Abler teacher than Professor Richards, who taught practice, Professor Sanford who taught surgery, and Professor Armor who taught physiology, it would be difficult to find in the chairs of any contemporary medical institution." Professor Samuel G. Armor later became professor of therapeutics in the Medical Department of the University of Michigan and still later professor of the practice of medicine in the Long Island Medical College in Brooklyn, N. Y. Dr. Armor was a graceful and eloquent lecturer. The writer well remembers the crowding of the lecture room with law and liberal arts students, University of Michigan, when Dr. Armor delivered his lectures on opium. The lectures were regarded as models of eloquence.

It appears that the course of lectures in Davenport closed in the spring of 1850 and opened in Keokuk, November, 1850. The "Regulations"

for the first term of lectures in Keokuk read as follows:

The next session will commence on the first Monday in November and continue sixteen weeks. The annual commencement will be held and the degrees conferred immediately after the close of the term. Every student will be required, within ten days after the opening of the session to take out the matriculation ticket, and pay the regular fee.

The following are the requisites for the diploma:

First—The candidate must be twenty-one years of age. Second—He must have attended two courses of medical lectures; one of which must have been delivered in the medical department of the Iowa State University, or evidence of three years reputable practice, will be regarded as equivalent to one course. Third—The candidate must have studied medicine for two years under the direction of a respectable medical practitioner. Fourth—He must write a medical Thesis either in the English, Latin, French or German languages. Fifth—He must pass an examination satisfactory to the faculty and pay the graduation fee in advance.

Fees—The fees for a full course of lectures amount to \$70. The student may attend one or more of the courses, as he may be disposed, and pay only for the lectures for which he enters. The fee for the diploma is \$20. The matriculation fee is \$5. The fee for admission to the dissecting rooms and demonstrations is \$5. Members of the profession from every part of the country who are graduates of medicine will on presenting their diploma to the dean and paying the matriculation fee be admitted gratuitously to all the lectures. Board can be obtained in the city at from \$1.50 to \$2 per week. Medical books

may be purchased at our extensive book stores, on as good terms as in any Western city.

JOHN F. SANFORD, M.D.,
Dean of the Faculty.

It may be noted here that the Keokuk school was nominally the medical department of the State University of Iowa, recognized as such by the Iowa legislature and later was granted appropriation of public money as will be hereafter noted.

The school was now fairly launched on a long course of usefulness, but troubles soon began to appear. Dr. N. S. Davis had recently located in Chicago, but entertained "peculiar" notions in relation to medical education which were not agreeable to the views of established medical colleges even from New York to Keokuk. The Western Medico-Chirurgical Journals, afterwards the Iowa Medical Journal, notes that Rush Medical College, an institution located in the city of Chicago, announced to the class that was about to enter upon courses of instruction, a sudden change of purpose in the minds of the faculty and a resolution to reduce lecture fees, which was at once adopted and proclaimed to the profession in an introductory lecture by Dr. N. S. Davis. The note goes on to state; "It was well known that Dr. Davis had for many years held peculiar views in regard to medical education; and that a morbid desire to force these innovations into conflict with time honored usages of the profession, had drawn upon him a severe rebuke from the eminent and venerable Professor Payne of the New York University."

Dr. Davis had just been appointed professor of physiology and pathology in Rush Medical Col-

lege. The offense he was guilty of was the extension of the time of lectures and reducing the fee. Dr. Davis was of the opinion that the interest of medical education would be furthered by making longer courses and reduced fees, so as to enable students of moderate financial ability to study longer in a medical college and therefore proposed to reduce the fees to \$35.00 in cash. It will be borne in mind that there were at that time many joint stock private medical colleges in the United States and by dividing the fees among the members of the faculty added very materially to the income of the professors.

The Journal referred to was edited by the Dean of the College of Physicians and Surgeons, Keokuk. This reduction of fees caused the faculty much uneasiness.

The editorial referred to speaks of the "sophistry and rottenness" of the introductory address of Dr. Davis with considerable spirit and hopes that the American Medical Association will consider the matter in a "sense of honor, dignity and propriety in cases where there is no written law applied."

It will be remembered that Dr. Davis was only able to carry out his plan of reform in medical education on the organization of the Chicago Medical College.

Another cause for grief appears in the December number of the Western Medico-Chirurgical Journal. The Evansville Medical College issued a bulletin proposing to admit "Sons of Temperance" at one-half the usual fee for tuition and in return for this concession, it seems that the "Sons of Temperance" expressed themselves as having no hesitation in recommending the school as in

every way worthy of public confidence. This kind of competition was very offensive to the editors of the Journal who were also proprietors of the Keokuk College.

In the same number of the Journal appears an announcement that the "College of Physicians of the University of Iowa opened in the city of Keokuk the first Monday of November under the most flattering auspices." The special reason for this good feeling appears to be the generous action of the city council in appropriating \$200 to "enable the faculty without embarrassment to make desirable additions to their various appliances." In the same number, the Journal expresses profound contempt at the opening of the Female Medical College of Philadelphia, and its disgust that seventy women have matriculated. This was in 1857.

A letter to Professor Samuel G. Armor from Professor J. F. Sanford, written from Iowa City, January 7, 1851 presents some interesting facts which show the advanced views entertained by Professor Sanford at that time in relation to medical education; he says, "A better primary education on the part of our medical students will do more to improve and maintain the honor and dignity of the profession than any arbitrary exactions of medical colleges or societies, or prescriptive legislative enactments, but numerous literary institutions in Iowa, will doubtless display their influence in the ranks of the profession."

In writing of the meeting of the State Medical Society for 1851, Dr. Sanford says:

It is very desirable that every portion of our state may be represented at Fairfield at the meeting of the State Medical Society in May next, that an extended

and combined effort may be made to develop the medical resources of Iowa. Dr. Sanford was apparently directing some medical legislation before the General Assembly at Iowa City in relation to the question of a state lunatic asylum. It was felt that the time had come when Iowa should have an institution of this kind, and on Tuesday morning a petition for an appropriation to build a lunatic asylum signed by several hundred names was introduced into the senate and immediately after, an able memorial upon the same subject from Professor D. L. McGugin. In this memorial, after presenting the statistics of insanity for this state and showing the necessity of such an institution, the professor made an eloquent appeal in behalf of this unfortunate class of our citizens which cannot fail to excite the commiseration of every philanthropist. The census returns in which these statistics are embraced have not been officially received from every portion of the state, and we therefore cannot indicate, exactly, the number of lunatics to be provided for; but adopting the proportion to the whole population found in other Western states there cannot be less than forty or fifty of these unfortunate beings in Iowa.

The watchful editor of the Journal takes offense on reading Dr. Davis' book on the "History of Medical Education and Medical Institutions in the United States," because Dr. Davis seems to give preference to the schools in Philadelphia and New York, over those of Keokuk and Chicago. It is apparent according to the Journal that the former schools have possessed some advantages, but altogether are quite inferior to the schools of Keokuk and Chicago in that they fail to give a thorough practical education to men who are about to enter on the practice of medicine. It is a startling realization of Dr. Davis' ignorance in not being able to recognize the advantages of

these two centers of medical education as set forth by the editor.

Notice is given in the April number of the Journal that Dr. Samuel G. Armor, professor of physiology and pathology in the Iowa University since the first organization of its medical department had been elected to the position of professor of natural sciences in the University of Cleveland.

It appears from an editorial in the June number 1851, that some criticism was made by the Medical News and Library of Philadelphia on the medical school at Keokuk. The Journal referred to the questionable ability of this school to properly train young men to receive the degree of doctor of medicine. The Medical News intimated that any number of physicians could associate themselves together under the general law, as the State Society, can exercise the right to decide upon the qualifications of every gentleman who practiced medicine in the state.

In the July number of the Journal there is an interesting account of the meeting of the American Medical Association at Charlestown, South Carolina. At this meeting Dr. Jones of North Carolina introduced the following resolution; Resolved, "That all the medical colleges in the United States are hereby earnestly and respectfully, through committees, chosen by them, at least once in every six years, to take into consideration the proper methods of harmoniously elevating the standard of medical education in said colleges." In this connection Dr. Drake offered the following resolution which was adopted; that in the opinion of this association, the students of our schools be required to matriculate within the first ten days after the opening of the sessions,

and continue their attendance to the end of the term, taking with them evidence of the same, to be presented with the tickets of the professors when they become candidates for degrees.

The secretary read a protest from the Iowa University against the representation of the Rush Medical College in this Association. The North-Western Medical and Surgical Journal—the organ of the Rush faculty, observed that the protest was made on the ground that Rush Medical College reduced fees for tuition as it asserted to the injury of the neighboring schools. On motion of Dr. Jervey of South Carolina the protest was referred to a select committee consisting of Drs. Huston of Pennsylvania, Grimshaw of Delaware, Gaillard of South Carolina, Wood of Pennsylvania, Adams of Massachusetts and Ermerson of Pennsylvania.

The ill-feeling which led to this protest grew out of what was regarded as underbidding in the matter of fees of the different medical schools.

A feeling of encouragement appears about this time in an announcement in the Journal that the means appropriated by the last General Assembly had been expended in the construction, or rather, the contract had been made which would give the University one of the finest buildings in the West. There will be three large lecture rooms, two of which seat over 350 students; one about 250 students. “The building is situated upon a beautiful and commanding eminence and faces the river, with the front finished in the finest style of architecture of 100 feet. It is 50 feet deep and attached to the main wings of the University Hospital erected and bountifully furnished by our generous city.”

We now pass from August, 1851 to July, 1854 for the lack of sufficient data. In 1854 the faculty consisted of: D. L. McGugin, M.D., professor of physiology, pathology and microscopy; Freman Knowles, M.D., professor of theory and practice of medicine; J. C. Hughes, M.D., professor of surgery and dean of faculty; J. E. Sanborn, M.D., professor of chemistry and materia medica; E. R. Ford, M.D., professor of obstetrics and diseases of women and children; Edward A. Arnold, M.D., professor of anatomy; P. Van Patten, M.D., demonstrator of anatomy. Fees: Matriculation \$5, diploma \$30, dissection room and demonstration \$5. Course of lectures for the session of 1853-1854 commence October 20 and continue sixteen weeks. Fees to each professor \$10.

It is quite apparent from the following editorial that the way of the Keokuk College was not altogether smooth; that an invisible enemy was conducting a propaganda of harmfulness "frightfulness" against the institution.

"The faculty have determined" says the editorial "to change the time of the opening of the college course for next winter to the first of November and close about the first of March. For various reasons we have concluded to make the change and we believe it will prove more satisfactory to all concerned. Circulars will be issued soon giving particulars, to which for further information, our readers are referred."

"We would remark by the way for the gratification of the friends of the school, that the secret and undercurrent efforts to distract and break down the college have most *signally failed*, as all such disgraceful means will in the end do. We

have not room now to dwell upon the particulars of this *dark plot*, but will refer to it again in the future. We take this occasion to thank our numerous friends over the state who were kind enough to put us in possession of the designs and the means employed, and also for their expressions of friendship and promises of aid if required." "From present appearances there will be a larger class than last session, perhaps double, and we would here assure those who have determined to attend the coming session, that the faculty are determined to make it still more interesting and profitable, and that it were well for those to make their arrangements to that effect at an early a day as possible."

A period of thirteen years follows without news from the medical department of the Iowa State University located at the City of Keokuk, Iowa. Some changes had been made in the faculty and the fees for the lecture course had been changed from \$10 each professor to \$40 for the entire course. Matriculation, dissection and diploma remained the same. The announcement for 1868 reads as follows:

Twenty-First Announcement of the Medical Department of the Iowa State University Located at the City of Keokuk, Iowa

President of University—Rev. O. M. Spencer, D.D.

Curators of Medical Department—E. R. Ford, M.D., president; E. H. Harrison, secretary; Wm. Leighton, esq., Hon. Samuel F. Miller, Wm. Patterson, esq., Hon. R. P. Lowe, S. Hamill, esq., J. B. Howell, esq.

Medical Faculty—J. C. Hughes, M.D., professor of the institutes and practice of surgery and of surgical clinics; George W. Hall, M.D., professor of physi-

ology, pathology and general therapeutics; H. T. Cleaver, M.D., professor of obstetrics and diseases of women and children; A. M. Carpenter, M.D., professor of the institutes and practice of medicine and of medical clinic; E. J. Gillett, M.D., D.D., professor of chemistry, toxicology, materia medica and microscopy; Edward Clapham, M.D., professor of general and microscopical anatomy and demonstrator.

D. Mooar, LL.D., lecturer on medical jurisprudence and forensic toxicology; L. C. Ingersoll, M.D., lecturer on the principles of dental science.

Dean of the Faculty—J. C. Hughes, M.D.

ANNOUNCEMENT

“The session of 1867-68 will commence on Wednesday, October 30. The Iowa State University was created by act of legislature during the session of 1846-47, and was munificently endowed by an appropriation from the general government. Thus, the medical department, was established by act of legislature in the year 1849, and has been liberally assisted by appropriations from the state.

The faculty of the medical department of the Iowa State University are pleased to announce to the profession throughout the Northwest, that the twenty-first regular course of lectures of an institution whose triumph has been signal, will open on Wednesday evening, October 30, with a general introductory lecture by Prof. Gillett. The session will close on the last day of February.

The college clinic affords ample opportunities for the student to apply the principles which he derived from the various branches taught. Patients are examined almost daily in the presence of the class, and surgical operations performed (if required) or prescribed for; and here the pro-

fessor conducting the clinic elaborates in detail, and explains the *modus operandi* of prescriptions, and the process of cure wrought by appliances and surgical operations. The surgical clinic is conducted twice a week, and frequently daily, by the professor of surgery, while the medical clinic is provided for by the professor of practice.

By reference to the resolutions passed by the Teachers' Convention, held at Cincinnati during the session of the American Medical Association in May last, it will be observed that the length of time recommended for study is increased to four years—including three lecture terms consisting of six months each—before the student is admitted to an examination for the degree of Doctor of Medicine. While the faculty most cordially indorse the suggestions of the Teachers' Convention with a view to the elevation of the standard of medical education, we deem it best to adhere, for the present session, to the established usage of colleges throughout the country, which require three years' study, including two courses of medical lectures—or, as an equivalent, four years' reputable practice and one course of lectures—as a pre-requisite.

Students are requested to make their arrangements to be present at the opening and remain until the close of the session; and the better to secure this end, the faculty would here state that certificates of attendance will be issued only for the time actually spent in attendance upon lectures.

Fees

For the entire course of instruction.....	\$40.00
Matriculation ticket.....	5.00
Demonstrator's ticket.....	5.00

Hospital tickets, gratuitous.....	.....
Graduation fee.....	30.00

The total expense to the student is less than at any other school of the country.

Graduates of this, and other regular schools of medicine, are admitted to all lectures, upon payment of a matriculation fee of ten dollars.

REQUIREMENTS FOR GRADUATION

Each student is required, within one week after the opening of the session, to pay the fees and procure his matriculation ticket. Candidates for graduation—

First—Must be twenty-one years of age, and present testimonials of good moral character.

Second—Must have attended two full courses of medical lectures, the last at the medical department of the Iowa State University; or, evidence of four years' reputable practice will be considered as equivalent to one course.

Third—Must have studied medicine three years (including lecture terms) under the direction of a respectable medical practitioner.

Fourth—Must furnish a satisfactory medical thesis (original and in his own hand writing), to be delivered to the dean, at least four weeks before the close of the session, accompanied by the graduation fee.

Fifth—Must pass a satisfactory examination by the faculty, at the close of the session.

The attention of students is called to the fact that the session of four months—six lectures daily—equals, in amount of instruction, any other school in the country.

The hospitals located in this city give superior clinical advantages to the student, and the moderate cost of tuition and other expenses, make it

one of the most desirable points for a thorough medical education.

Our Medical College—The coming session, 1867-68, of our medical institution, offers advantages to the student equal to any institution of the country. Our corps of professors are men of experience as teachers and practitioners, and western in their energies and ideas. Our appliances are in all the departments, every way equal to the wants of the profession and student. We labor to qualify young men for the full discharge of all professional duties not theoretically alone, but practically. We teach not only from lectures, but by daily examinations and illustrations leaving practical facts indelibly impressed upon the mind of the student. The cost, considering the length of the session and number of lectures, is less than at any other of our regular colleges. Our aim has always been, to save time and money for the student, and give him all the advantages of a thorough medical education. This we claim for the medical department of the Iowa State University."

Clouds began to darken the horizon of the medical department of the Iowa State University at Keokuk in 1868-1869. Rumors of a new medical department located in connection with the University at Iowa City began to circulate. The views of the dean of the Keokuk school found expression in an editorial published in the Iowa Medical Journal for January and February, 1869.

THE UNIVERSITY AND ITS MEDICAL DEPARTMENT

"The subject of a medical department in connection with the literary department at Iowa City, is creating considerable discussion at this time.

We had written an article for this number of the Journal, but for the want of room are compelled to withhold it until the next issue. Should our literary and law departments at Iowa City be so unfortunate as to have their quiet disturbed by a medical department, we trust that it will fare better in the Association than the medical department of the Michigan University, connected with the literary and law departments, at Ann Arbor. The Medical and Surgical Reporter, of Philadelphia, December 19, speaks as follows:

The state authorities by their course toward the medical department of the University of Michigan, are keeping that university in such a constant turmoil and excitement, that some of the profession may yet withdraw from all connection with it. They certainly will, if the policy is pursued of forcing irregular practitioners into position in the institution. This unsettled and uneasy feeling in connection with the medical teaching in that state has probably led to the organization of the Detroit School of Medicine, etc.

When medical schools are wholly under state patronage, and associated with the literary and law departments, as exist in Michigan, and which the trustees of the university propose to adopt in connection with our university, it cannot but result in disaster to the school and the best interests of the profession.

Unless our trustees will provide for all the pathies and isms in their organization, the friends of those several isms will be on the alert when appropriations are asked, for the support of this department. It is not to be supposed that the several legislative assemblies which shall hereafter convene in our state, will be a unit in thought,

word and action on the subject of Medical Education. I remember very well, at a meeting of our state legislature in Iowa City (the old capitol), we succeeded in securing the passage of a bill appropriating to the College of Physicians and Surgeons at Keokuk, known as the medical department of the Iowa University, the sum of \$5,000. But imagine our surprise when the bill was vetoed by the governor, and in his message accompanying the veto, he gave as one of his principal reasons for the course pursued that the legislature had no right to favor by their appropriations from the state funds one class of medical men over that of another. The same argument will be used, should the trustees of our university carry out the plan proposed, and prejudice not only the medical department, but the interests of the other departments associated with it."

In spite of the warning of disaster emanating from the Journal the Iowa City interests continued active and finally prevailed, notwithstanding many difficulties and discouragements. The new school was organized in 1870 and still exists as the medical department of the Iowa State University. The Keokuk school struggled to maintain its identity as a department of the State University for a few years, or until the Iowa City school became an established fact, when it became content to continue under the name of the College of Physicians and Surgeons but maintained a belligerent attitude for many years, until internal dissensions led to a division, giving Keokuk for a few years two schools, the new school being known as the Keokuk Medical College which finally absorbed the old College of Physicians and Surgeons. At last with the organization of the Council of Med-

ical Education of the American Medical Association and the increased responsibilities of medical colleges in furnishing adequate medical training, the financial needs became so acute that it became necessary to merge with some other institution apparently more fortunate and in 1908 turned over its assets to Drake University in Des Moines and became a part of the Drake University School of Medicine. The merger with Drake promised much until 1913 when the combined schools felt the increasing pressure of the higher demands of medical education, and not being able to secure sufficient financial support, merged with the State University. These mergers relieved the medical college situation in Iowa which had long divided the medical profession in the state into groups which had brought much discord and no little bitterness at times between the rival factions. The single school under the financial support of the state and the moral support of the profession has brought about the building up of a creditable school of medical activities which promises much for the future.

MEDICAL DEPARTMENT OF IOWA STATE UNIVERSITY AT IOWA CITY

PART FOURTH

The history of the organization of the medical department of the State University at Iowa City has some intricate points that we have from several sources been in the main able to solve. As all the active participants are dead we have little fear of contradiction unless some one seeks the same sources of information, and places a different interpretation on the facts, which it will not be easy to do.

The medical department of the Iowa State University laid the first stone of its foundation December 7, 1848 when Dr. J. M. Vaughn and Mr. Stephen Whicher, an attorney, appeared before the board of trustees to present a statement of the "Condition and Wants of the Medical Faculty of the State of Iowa." It appears that on December 6 a convention of physicians was held in Iowa City to consider the organization of a medical department of the State University and requested that this voluntary organization be recognized as the medical department. The convention that met on December 6 left no record of its proceedings or agreements, only the records show that on the following day, December 7, the "Convention" was represented before the board of trustees by a physician and a lawyer to make certain arrangements with the board concerning a medical department without any claim on the funds of the university. It is a peculiarity of uni-

versity trustees to be generous to professional men who will give valuable services when there is no money consideration, in sight at least.

In January, 1849, a block of land was donated by the legislature to the medical department on condition that within two years the faculty and officers erect a building thereon at a cost of not less than \$1,000. No steps were taken to organize a medical school at Iowa City, beyond a movement to unite with the State University by designating seven of the gentlemen representing the "Convention" as members of the faculty by the board of trustees, all but one of these instructors had already been designated. It was provided that these acting together should constitute the medical faculty and were empowered to fill vacancies and arrange the details of administration. It was further provided that the expenses of this organization should not be a charge on the funds of the university and that such reports as the board might demand should be promptly submitted following the opening of the first course of lectures which, as authorized, was to begin on the first Monday in November, 1849, and to continue for a period of sixteen weeks, but no medical school appeared in Iowa City.

The facts were, that the "Convention" of physicians seeking to organize a medical school as a department of the State University represented the faculty of the College of Physicians and Surgeons of the Upper Mississippi, then located at Davenport, but the next year, 1850, moved to Keokuk to become the College of Physicians and Surgeons of Keokuk. The purpose was to secure recognition as the medical department of the State University and not to organize a medi-

cal school at Iowa City, as is shown by the appearance of the same Mr. Whicher before the board of trustees with a memorial requesting the recognition of the College of Physicians and Surgeons at Davenport as the medical department of the Iowa State University. The members of the faculty to retain the power of filling vacancies but subject to the approval of the university trustees.

The constitution of 1857 permanently established the university and all branches and departments at Iowa City, nevertheless the College of Physicians and Surgeons of Keokuk, claimed to be and was generally recognized as the medical department of the State University until 1870 when the medical department was organized at Iowa City. The constitutional difficulties were recognized by the Keokuk school and in 1858 the faculty presented a memorial to the legislature then in session "requesting an interpretation of the relations of that institution to the State University under the provisions of the new constitution." The memorial was submitted to the judiciary and the opinion was, "that although all appropriations of funds from university resources were clearly to be confined to the one institution at Iowa City, it was not believed that the medical department at Keokuk was cut off from all connection with it. Since it had been so connected for about eight years and was a recognized department at the time the constitution was adopted, and since there was no specific provision severing its connection with the same, nothing seemed to prevent its continued nominal connection and no further legislation was needed to define its relation."

During the session of the legislature that fixed the status of the Keokuk school a loan of \$15,000 was secured from the common school fund for the institution. The loan was originally fourteen years. An inquiry made by the legislature of 1879 showed that no part of the \$15,000 had been paid. Suit was instituted and judgment obtained in Lee county against the Keokuk Medical College with a loss to the state of \$10,000 and interest on \$15,000 for thirteen years.

The first attempt to organize a medical department for the Iowa State University in December, 1848, was in fact, in the interest of the school which arranged to hold its 1849 session at Davenport and in 1850 at Keokuk. During the twenty years following, efforts were made from time to time, to secure permanent recognition by the state and to secure appropriations of money. About \$20,000 in all was appropriated and at last, when it was discovered that the legislature had given money unlawfully, an attempt was made to recover the \$15,000 borrowed from the common school fund, about \$5,000 was recovered by suit. The bill granting \$5,000 in 1848 from the sale of land granted by Congress for university purposes was vetoed by Governor Grimes. An attempt to pass the bill over the governor's veto failed by a vote of 32 to 27, 8 less than the constitutional requirement.

In 1868 Dr. W. F. Peck appeared before the board of trustees in the interest of a new school to be located in Iowa City. This was the beginning of the present medical department of the State University. Final arrangements for organization were made in 1869.

Old South Hall then occupied by Professor

Parvin as a residence was remodeled by an expenditure of \$3,000 for the use of the medical school. The school was opened in 1870. The fees were fixed at \$80 for lectures, \$5 for matriculation and \$30 for graduation. An effort was made in the legislature to abolish the new medical department. The senate passed the bill but was indefinitely postponed in the house. When the Regents took up the final arrangements it was proposed to suspend the medical department for the reason that its continuance would not be to the advantage of the University, but the movement was defeated by a margin of one vote.

Before the adjournment of the 1870 session another attempt was made to postpone opening the medical school, for the reason that it would require a large sum of money and that adequate accommodations could not be secured. Four of the nine Regents believed that a medical department would be contrary to public demand, and that the expense of equipment would be against the best interests of the University. Many reasons were urged in favour of postponing the organization of the school. Notwithstanding the objections offered by the legislature and the Board of Regents the school was opened in 1870 under discouraging conditions.

The faculty was organized by establishing seven chairs, each chair to be filled by an instructor who should depend for compensation and expenses upon the fees paid by students. The following June a resolution was presented to the Board of Regents declaring; "that in as much as the medical department had been struggling along throughout the previous year without means of

support, it was not expedient to continue it; and although it was recognized as having done remarkably well, under the circumstances it was recommended that the work be suspended until the legislature should make suitable appropriations for that specific purpose."

With our present day views of medical schools the wisdom of such a proposal would not be challenged, but at the time when the Iowa City school was struggling for an existence, a few professors, a few benches and a roof was felt sufficient for a beginning. We can in this struggle see afar the hand of the able Keokuk group.

In June, 1872, \$500 was appropriated by the Regents for a department library. It was not until March, 1873, that any provision was made for a hospital. It was proposed to turn over the Old Mechanics Hall for hospital purposes providing the faculty would bear the expense without help from the University. Seventy students attended the 1872-73 session.

The legislature manifested small interest in the department and had it not been for the earnest work and sacrifice on the part of the faculty the school would not have been continued. In 1875 the school made an effort to secure recognition from the Royal College of England but recognition was made to depend upon the character of the entrance literary requirements and the Iowa City school could not qualify. Notwithstanding the efforts of Professors Peck, Schrader, Clapp and Henrich no entrance examination requirements had been made and no better accommodations could be secured. It was not until 1879-1880 that a preliminary entrance requirement was published.

The regular course of lectures began in October and extended to the holiday vacation, called the fall term. The winter term ended in March, or twenty weeks of school work including lectures. The students were required to take two such courses of lectures or forty weeks altogether for the degree of Doctor of Medicine. These were the requirements generally in force everywhere in the United States. There being no legal standards in force fixing the educational requirements for the practice of medicine there was free commercial competition among the medical schools throughout the country. If the doctor was not an educated man in those days the fault was not altogether his.

In 1876-1877 an optional three years' course was urged but the movement was thought premature.

In 1882 the legislature granted the first appropriation to erect buildings for the accommodation of the medical department; up to that time the medical school had occupied Old South Hall previously referred to.

The courses of lectures as established in 1876 continued in force until 1889-1890 when the courses were extended to three years of six months each. There was established the junior, middle and senior years and an entrance examination in certain specific subjects of an English education unless the candidate held a degree from some college or secondary school.

It now became apparent that increased hospital facilities were of paramount importance and in 1887 a propaganda was started to secure an appropriation for the construction of a University Hospital. In 1890 some relief came from an en-

largement of Mercy Hospital. But the idea of a University Hospital was never lost sight of and after many years and at various periods the present excellent hospital was completed and equipped.

In response to an increasing demand for better training of medical students, the medical department, beginning with the session of 1891-1892, the course of instruction was again extended by requiring four years, one with a preceptor and three years of six months each in college. In 1896 the college course was increased to three years of eight months each and one year under the direction of a practitioner. In 1901 it was announced that the course would soon be extended to four years of thirty-six weeks each.

The question of better preliminary training for the study of medicine began to be agitated by medical teachers and in 1901 the admission qualifications to the medical department of Iowa State University included three years of secondary work from an accredited school, provided the course included one year of Latin. This was extended to a full high school course and in 1909 to one additional year in college and in 1910 it was provided that a student entering on a medical course should be required to take two years in college following a four years high school course.

We have thus briefly outlined the inception and growth of the medical department of the Iowa State University. We have pointed out the skillful maneuvering of a private medical school to secure recognition and financial support and the equally skillful management of Dr. W. F. Peck and his associates in securing the organiza-

tion of the Iowa City school. It is indeed to be regretted that none of the first faculty lived to see the fruits of their early efforts and sacrifices. It was not given them to know that the department, frowned upon by the legislature and even looked upon with suspicion by a strong influence in the board of regents; with a course of study which included only two courses of lectures of twenty weeks each; lodged in a faculty private residence vacated for the purpose, and persistently refused essential appropriations in its most trying years, should in a generation become a strong and fully equipped medical college of the most approved type.

(We have in many respects followed Vol. IV, *Annals' History of Education in Iowa* published by the State Historical Society.)

MEDICAL EDUCATION IN IOWA

THE IOWA COLLEGE OF PHYSICIANS AND SUR-
GEONS OF DES MOINES AND THE MEDICAL
DEPARTMENT OF DRAKE UNIVERSITY

PART FIFTH

Toward the end of the period of new private medical college enterprises the profession of Des Moines began to consider the question of establishing a medical school in that city. Des Moines had become the capitol of the state, the political center, and promised much in the way of commercial prosperity and growth. It was apparent that the city would outgrow all other cities in the state and under conditions then existing in relation to medical education, Des Moines was the logical place for a medical school in Iowa. No one at that time could foresee what the requirements for a medical education would be in the near future.

In 1874 or 1875 Dr. A. G. Field began to agitate the question of a medical school in Des Moines. Dr. J. F. Kennedy soon became interested and also Dr. J. A. Blanchard. Numerous conferences were held in which Dr. J. T. Priestley, Dr. D. S. Fairchild and others participated. The discussions were not materially different from those which marked the organization of other infant industries with small capital; would the financial returns warrant the investment in the face of the existing competition? Every important city in the United States had one or more medical colleges. All presented certain attractive features according to location, but all agreed on

one very important feature, and that was that the courses should be conducted with such skill that few candidates for graduation would fail. With such attractive features it was yet a serious question if enough students would matriculate to pay current expenses. To give the necessary time as a teaching faculty was something but in addition to give money was more. However, in 1881 the plans were perfected for opening the regular session in 1882 under the name of the Iowa College of Physicians and Surgeons.

In those comparatively early times various reasons were given for the organization of a new medical college, generally a "long felt want." Sometime a sense of loyalty to the growing city. It was sometimes said by those outside, that these enterprises grew out of a desire on the part of ambitious men to become professors; that it was a modest way of advertising. There was perhaps some evidence in support of this view. In older centers of population when the existing schools could no longer supply enough professorships for all the ambitious practitioners of the healing art, new schools were brought into existence. In the Western states, state universities were not thought to be complete without a medical department regardless of the size of the town or the natural facilities for such work and no city with possibilities could afford to be without a medical school, or at least, that was the way the local profession looked at it.

The first course of lectures opened at the Des Moines school in October, 1882. Dr. D. S. Fairchild was selected to deliver the opening address the week before formal lectures commenced. The

address was delivered in the main lecture room on the third floor of a building adjoining the Old Register building on Court avenue.

The faculty consisted of J. A. Blanchard, M.D., Principles and Practice of Medicine and Dean of the Faculty; A. C. Simonton, M.D., Surgery; J. F. Kennedy, A.M., M.D., Obstetrics and Diseases of Children and Secretary of the Faculty; W. H. Ward, M.D., Gynecology; J. T. Priestley, M.D., Anatomy; L. C. Swift, M.D., Physiology; T. E. Pope (Professor Chemistry Iowa State College Ames), Chemistry; D. S. Fairchild, M.D., Ames, Pathology, Histology and Microscopy; E. H. Hazen, M.D., Eye and Ear; F. E. Cruttenden, M.D., Diseases of the Throat and Nasal Passages; Judge C. C. Nourse, Medical Jurisprudence, and C. M. Colvin, M.D., Demonstrator of Anatomy.

The requirements for graduation were three years with a preceptor including two courses of lectures of four months each, the last of which must be in the Des Moines school. No special admission requirements were made at that time, but it was understood that a teacher's certificate would form the basis of literary preparation. There were now three regular medical schools in operation in Iowa and these three schools soon became centers of medical factions which in a few years entered the State Society and created no little discord.

The standards adopted by the Iowa College of Physicians and Surgeons were similar to the standard adopted by nearly all the schools in the United States. Very imperfect indeed, but the competition for students was such that no school

up to that time had the courage to raise the standard of admission, or extend the course of medical instruction. Rush Medical College, the largest and most influential of the Western schools in its announcement for 1883 states as follows: "The annual course of lectures commences on Monday, December 4 and will continue sixteen weeks. The requirements for graduation are three years study with a reputable physician. Two courses of lectures, one of which must be in this institution (or two years practice in lieu of one course)" etc.

Dr. J. A. Blanchard was the first Dean and served two years. When he resigned Dr. D. S. Fairchild was elected president of the school which office he held until the school was taken over by Drake University in 1886 when Dr. Lewis Schooler was made Dean.

The Iowa College of Physicians remained a purely private school until 1886-1887 when it became the medical department of Drake University, and began to assume some of the dignity of an university school as much at least as was warranted under the circumstances of an empty treasury with very remote possibilities. Drake University which had been expanding by organizing professional schools to become more distinctly a university, made up a medical department by bringing together a group of eclectic physicians to constitute a medical faculty. It was believed by the scholarly men who made up the official body of the university that the term eclectic meant a broader conception of medicine than any other system and more in accordance with a devoutly religious faculty.

But in the course of three years the university

medical faculty meetings became so discordant that on occasions it became necessary for the police to preside. Finally the character of the discussions, the language used, the broken chairs and other things became so abhorant to the board of trustees that the eclectic medical department was discontinued. It now came about that negotiations were commenced by which Drake University was to absorb the College of Physicians and Surgeons. The affairs of the latter were placed in the hands of Dr. Lewis Schooler who concluded the negotiations, became dean of the medical department and professor of surgery. During the foregoing period of the history of the college the institution was able to pay its rent and other expenses and was in good standing with all American medical colleges. No salaries were paid the faculty, and Drake continued the same policy. The affiliation with Drake University was only nominal and but for the persistent energy of Dr. Schooler the medical school would not long have survived. In 1903 the question of final abandonment was under serious discussion; it was then that President Bell and Governor Drake (the founder of the university) began an earnest effort to revive the medical school. Dr. D. S. Fairchild was appointed to the position of dean and professor of surgery. Up to 1893 no regular clinic had been held. The only hospital in Des Moines up to that time was a small private residence which had been converted into what was known as Coltage Hospital, although added to from time to time it contained only a few beds. The clinics were irregular. The instruction was therefore chiefly didactic. With the building of

Mercy Hospital Dr. Schooler was able to arrange for a regular surgical clinic and Dr. J. T. Priestley who was professor of medicine now organized a fairly good medical clinic.

In 1903-1904 the university was able to secure about \$20,000 for a building to provide for the clinical faculty. The laboratories and anatomy, physiology and chemical departments were provided for in the science building on the university grounds. The clinics were held at Methodist and Mercy Hospitals and with the erection of the new college building a fairly good dispensary clinic was developed.

With the reorganization of the medical school in 1903 the first two years students were placed under the direction of Dr. F. J. Smith as junior dean, the first time freshman and sophomore students were able to avail themselves of the instruction of full time teachers.

It may be said therefore that in 1903-1904 Drake University School of Medicine began to take on the character of a real medical school. The course of instruction included four years of thirty-six weeks each with an entrance requirement of an approved high school course with two years in college. Previous to this time the school followed the requirements of the State University but now it boldly adopted the more advanced requirements and petitioned the state board of examiners to require of candidates for examiners the high school and college entrance requirements and the four years of thirty-six weeks each of medical school work which was soon accepted by the board and has been the rule since.

The full requirements stated above were not put

in operation at once in 1903-1904 but were germinating, and did not actually come into operation until two years later. In 1908 the Keokuk medical school realizing that a medical school without considerable financial resources was impossible and that student fees alone fell far short of meeting certain fixed expenses, opened negotiations with Drake to take over the equipment of that school and merge the two institutions at Des Moines under the name of Drake University School of Medicine including the dental school. The merger was accomplished and the session of 1908 opened under rather encouraging conditions. But the dean of the school who was in close touch with medical school sentiment as it existed in the council of medical education was thoroughly convinced that Drake University did not possess sufficient financial resources to continue in operation many years and hold high rank among medical institutions, requested to be relieved. Dr. Fairchild who had completed twenty-five years of uninterrupted service without money compensation and with the prospect of further financial assessment and the devotion of a large part of his time to the work of the department felt that the time had come to transfer the position of dean to other hands, but was induced to continue another year and in 1909 at the close of the session presented his resignation which was accepted and Dr. W. W. Pearson was elected dean.

The election of Dr. Pearson was fortunate. The work of organization had been completed but there was much to do in perfecting the details and the filling of important positions and in providing means for the expenses which were rapidly in-

creasing. Dr. Pearson with great energy and skill rapidly increased the efficiency of the work and if a sufficient endowment could have been secured Drake University medical school would have become an institution of much importance and influence. With the close of the session of 1913 it was announced the Drake Medical School would be discontinued and would merge with the Medical Department of the State University of Iowa at Iowa City.

We believe it may be fairly said that few instances can be recorded of greater devotion and self-sacrifice to the cause of medical education than was exemplified by a small group of the medical faculty of Drake Medical School. Many changes in the faculty occurred. During the periods of apparent prosperity when it seemed that permanent success was assured, men were easily found who were willing to serve. But during the dark days Drs. Schooler, Priestley, Fairchild and Smouse and a few others were staunch and made many personal sacrifices. The graduates have generally held responsible places in their respective communities and some have reached marked distinction. The general average certainly ranked high, not so much perhaps because of their medical learning, but because of their ideals. In the last years of its existence under the administration of Dr. Pearson the facilities, equipment and thoroughness of instruction had reached a high degree of efficiency and bid fair to equal the best of the smaller colleges, but the day finally came when the school must end its existence and in an honorable manner by candidly and generously admitting that the necessary endowment could not

be secured to maintain a modern medical school. It may fairly be admitted that the medical school organized in Des Moines in 1882 had a beneficial influence on the profession of the city. At no time in the history of the institution did it encourage or even tolerate irregular or questionable methods of securing students or permit members of the faculty to use the school for private advantage or gain, except such as was incidental to the position held in a medical college. Those who have known the school during the period of its existence can bear witness that its methods were ethical. It will be granted we believe, that its influence was for higher standards of medical practice and in some measure at least the most prominent practitioners of the city gained an inspiration which has been and will continue to be helpful in future years.

In tracing the development of better preparation for entrance and graduation Drake followed the course of other medical schools. It was generally recognized that the average medical student sought the school that would bring him into the profession in the shortest time possible and one school watched the other for any signs of better management or the introduction of more attractive features. It may be said that higher entrance requirement and longer courses of study were not regarded as attractions. The providing of endowments for medical schools led to some experiments in this direction and public professional opinion came to the aid of medical colleges which would like better conditions. Finally one school bolder than another demanded three courses of lectures and to the surprise of many instead of

loosing apparently gained in strength. Soon the length of the term was increased and four years of medical study was required with longer lecture courses ; then a four years high school course was recognized as the necessary minimum entrance requirement. This was followed by one year in a college of liberal arts, then two years and at last two years of college work and four years of nine months each in a medical school and now we may expect that the addition of a hospital year which has been adopted in a few states will be the standard requirement.

In the earlier years of reform in medical education the council on medical education came into existence to stabilize and standardize medical education and has been a most potent factor in promoting progress in this direction, and finally there came into existence the national examining board which will gradually obliterate state lines and will lead to but one examination to practice in all the states and foreign countries.

THE IOWA STATE MEDICAL SOCIETY

PART SIXTH

The organization of the Iowa State Medical Society in 1850 was due to the efforts of Dr. John F. Sanford of Davenport.

On May 1, 1849, Dr. Sanford attended the session of the American Medical Association held in Boston as a delegate from the College of Physicians and Surgeons of the Upper Mississippi, then located in Davenport, and later known as the College of Physicians and Surgeons of Keokuk. Dr. Sanford was so impressed by the appeal to organize state medical societies that on his return home he wrote many letters to physicians urging them to meet in Burlington, June 19, 1850, for the purpose of organizing the Iowa State Medical Society. Fearing that sufficient interest would not be aroused by correspondence alone, he concluded to make a personal appeal and took the stage to Keosauqua, Fairfield, Mount Pleasant, Washington, and Davenport, and steamer to Muscatine, Burlington, Fort Madison and Keokuk.

On June 19, 1850, twenty-five physicians gathered at the court room in Burlington, Dr. J. F. Sanford acting as temporary chairman and Dr. E. D. Ransom as temporary secretary.

Professor Sanford delivered an able and eloquent address on the objects contemplated by the convention and which should engage its attention during the present session.

A committee was appointed to prepare and present a constitution. The committee consisted of Drs. J. F. Henry and E. Lowe of Des Moines

County, Dr. McGugin of Keokuk, Dr. Elbert of Keosauqua and Dr. Witherwax of Davenport. The following officers were elected:

Dr. E. Lowe, Burlington, president.

Dr. John D. Elbert, Keosauqua, first vice-president.

Dr. D. L. McGugin, Keokuk, second vice-president.

Dr. H. M. Mathews, Burlington, recording secretary.

Dr. J. F. Sanford, Keokuk, corresponding secretary.

Dr. G. R. Henry, Burlington, treasurer.

Dr. J. F. Dillon, Farmington, librarian.

Drs. J. F. Henry, D. L. McGugin, J. D. Elbert, A. Hull, J. W. Brookbank, E. D. Ransom, and James Flint, censors.

The Burlington Tri-Weekly Telegraph presents the following report of the meeting:

The convention is eminently respectable in appearance, and anyone would see at a glance that it embraces among its members all the learning known to the profession, and the numerous and able speeches made by various members during the debates of yesterday evinced a high degree of talent. Indeed, taken as a whole, it is perhaps the most respectable convention which has ever assembled in our state. There are many gray beards among them, who while adding dignity and weight of character to the convention, also give tone and direction to the proceedings. Among these may be mentioned as particularly active upon the floor, Dr. McGugin, an old practitioner and formerly a politician of some prominence in Ohio, but more recently a surgeon in the army and at present a resident of Keokuk, and Dr. J. F. Henry of our own city, each of whom being

naturally good talkers entertained the convention during the discussions of the day with several handsome efforts. Others who took part in the debates sustained themselves very creditably—and if they could be kept together a month or so there is no telling which of them would not come out an accomplished speaker. Several legal gentlemen dropped in during the day to hear the debates, but they generally went away with the impression that their craft was in danger, and that the gift of gab was breaking loose among the professions generally.

Dr. Lowe, on being conducted to the chair, made a brief and appropriate address in which he returned thanks to the association for the honor which they conferred upon him. This is a compliment of no ordinary character, and it has been bestowed upon one who stands deservedly high, not only in his profession, but in the confidence and esteem of all who know him.

Charter members of the Iowa State Medical Society:

Drs. E. Lowe, G. R. Henry, Phillip Harvey, E. D. Ransom, J. H. Rauch, J. W. Brookbank, H. M. Mathews, Burlington; John F. Sanford, J. C. Hughes, D. L. McGugin, E. R. Ford, Josiah Haines, Keokuk; N. Steele, J. Robinson, J. F. Moberry, Fairfield; John F. Dillon, Farmington; J. D. Elbert, J. E. Evans, James Flint, Keosauqua; J. J. Ellison, Wapello; E. G. Fountain, Davenport; J. H. Hershey, George Reeder, Muscatine; M. J. Morseman, Iowa City; W. H. Rosseau, Washington.

Seven of these organizers were afterwards elected president and one of them occupied the chair twice. Dr. John F. Sanford, who did more to promote the organization of the Society than

any one else, called the meeting to order, made an able address, acted as chairman during the organization and should have been considered the first president. He was a graduate of the University of Pennsylvania and was for many years one of the most prominent surgeons in the state. He was the prime mover in the organization, of the College of Physicians and Surgeons of Keokuk and was professor of surgery in that institution for four years. He died in 1874.

At this the first session of the Iowa State Medical Society, Dr. D. L. McGugin of Keokuk introduced the following resolution which was adopted:

Resolved: That in the opinion of the Society, the sale of adulterated drugs and chemicals should be speedily arrested and to this end, the legislature of the State of Iowa, be memorialized at the coming session on the subject and an appeal be made to those engaged in the trade within the limits of the state to supply the profession with pure and unadulterated medicines.

The second meeting of the Iowa State Medical Society was held in Fairfield on the first Wednesday in May, 1851.

At this meeting Dr. J. F. Sanford presented an interesting report on the causes which contribute to depress the science and dignity of the medical profession of Iowa. One of the most prolific causes for the unhappy condition of the profession was due to a want of preliminary education in those who have entered the profession, and this was thought to be the most influential cause of depression among us. It is stated that every community must form its estimates of med-

ical men from their proficiency to a knowledge of things of their acquaintances, with the departments of learning which may be made familiar to the popular mind.

The second most prolific cause which tended to lower the estimation of the profession in the minds of the public, refers to the influence of ignorance upon the physicians themselves. The extensive relation that medicine must ever maintain with other branches of knowledge, deprives a physician who is ignorant of the general principles of natural science, of all those instrumentalities which are necessary to develop the resources of his profession, and it not only disqualifies him from adding to the existing stock of valuable facts, but excludes him also from participating in the benefits of many of those brilliant truths, whose development has so greatly distinguished the modern cultivators of our art.

"Being thus deprived of the only means of attaining distinction in his profession, and uninspired by the lights that physical science throws around his path, he becomes indifferent to the progress and often to the honor of the profession.

"The third cause of the depression of medical science in this state is the commencement, by young men, of the practice of the profession before they are thoroughly qualified." (We presume Dr. Sanford refers to young men who practiced without medical college training or on one course of lectures.) "This evil had its beginning at a remote period, when the facilities for completing a medical education were beyond the means of a large number who annually entered the profession." Dr. Sanford proceeds to speak

in praise of the multiplication of medical colleges as a means of overcoming these defects. (Quite different from the sentiment existing today among medical educators.)

Dr. Sanford does not forget to deprecate the habit of some regular physicians of entering into consultation with quacks of various kinds, which he reasons as one cause for the depression of medical practice. Dr. Sanford enumerates still another cause for the low standing of the medical profession; the practice of attending families by the year. He further says; "The medical service of an enlightened and benevolent physician are not to be made an article of traffic and bargain. His commerce is with the health, the lives and happiness of the human race, and should be as free from purely mercenary influence, as is his honor and reputation. But there is a principle of justice as well as propriety, outraged by this practice. If an intelligent man's estimate of a physician is not reduced by the mere fact of the bargain itself, it certainly is affected at the end of the year, when he comes to pay the physician \$15 or \$20 for nothing done, or for four times that amount of service. Again, physicians are often retained in a family by virtue of a contract of this kind, long after they have ceased to be preferred—a circumstance which almost invariably causes them to loose the respect as well as the confidence of those who are thus bound.

"These observations relate to individual instances, yet sufficiently numerous to justify what we have briefly said, every member of the society will appreciate the importance of individual rectitude to the reputation of the whole profession,

where lines of distinction are not fairly established. Our profession, as a whole, stands pre-eminent for public virtue, probity and usefulness; yet the individual shortcomings of its members have often excited a popular and erroneous prejudice against it."

Much more was said by Dr. Sanford which we have not space to abstract, and we are lead to wonder whether the seventy years which have passed since Dr. Sanford presented this address has brought about any material improvement in ethics, or whether the standards of professional morality have improved in the long period since Dr. Sanford wrote the words quoted. Whatever may be the facts, we read with pride the words emitted from the founder of the Iowa State Medical Society in the first formal report.

Dr. E. W. Lowe in his opening address at the Fairfield meeting in 1851, called attention to an epidemic of cholera in Burlington during the summer of 1850 and offered some remarks on the death of Dr. Bruning, "a native of Germany, a reputable scholar and devoted student, a graduate of the medical department of the Missouri State University, who fell a victim to the disease."

The Committee on Constitution and By-laws appointed at the first meeting in Burlington in 1850, reported the following constitution and by-laws together with nineteen rules of ethics taken largely from the code adopted by the American Medical Association which remained in force until 1872 when they were rewritten. Prior to this time, there being few county societies, any regular physician in good standing could, on application and passing a satisfactory

examination before the board of censors, become a member. In 1873, a new constitution and by-laws was adopted basing membership on election by a county society, after such election the delegate became a permanent member provided he paid his dues annually. This delegate plan remained in force until 1904 when the re-organization plan of the American Medical Association went into effect throughout the United States.

Constitution, by-laws and rule of ethics adopted at the Burlington meeting, May 19, 1850:

For the purpose of harmonizing the profession of medicine, and of promoting its usefulness and respectability, the undersigned practitioners of medicine in the State of Iowa, do adopt the following constitution, to-wit:

Article I. This association shall be known as the Iowa State Medical and Chirurgical Society, and shall hold its regular meeting on the first Wednesday of May, of each year, at such place, as the society shall from time to time determine.

Article II. The officers of this Society, shall be a president, two vice-presidents, recording and corresponding secretaries, treasurer, librarian, and seven censors; any three of these shall be a quorum.

Article III. The officers of this Society shall be elected annually at the meetings, and shall perform the several duties of their respective offices until the close of the next annual meeting, and until their successors are chosen.

Article IV. They shall be chosen by ballot, a majority of all the votes given being necessary for a choice.

Article V. It shall be the duty of the president and in his absence, the first and second vice-president, to preside at all meetings of the Society, enforce order, put all questions to the house, decide

questions of order, subject to an appeal, to give the casting vote, except at elections, and perform any other duties consistent with parliamentary regulations.

Article VI. It shall be the duty of the recording secretary to keep a correct minute of all the proceedings of the Society, subject to the scrutiny of its members.

Article VII. The duties of the corresponding secretary shall be in all cases carried on under the direction of the Society.

Article VIII. It shall be the duty of the treasurer to keep the funds of the Society, and disburse them to its order.

Article IX. It shall be the duty of the librarian to take charge of any books, or cabinet specimens in the physical sciences, and in pathological anatomy, that may become the property of the Society, and keep the same under such regulations as may be hereafter ordered.

Article X. Any regular practitioner in good standing may become a member of this Society on presentation of a diploma from a respectable medical college, or of a license from any respectable medical society, or upon the recommendation of a majority of the board of censors, and the payment of an initiation fee of one dollar.

Article XI. Any person who has been thought worthy to practice medicine, surgery, etc., by the board of censors who have examined him touching his skill, shall be entitled to receive a certificate of qualification, signed by the president, or in case of his death, absence, or resignation, by the oldest vice-president, and the recording secretary, for which he shall pay a fee of ten dollars.

Article XII. Any member of the board of censors may, on the examination of an applicant, issue a temporary license, which shall expire at the next annual meeting of the Society.

Article XIII. This Society shall have power to open a correspondence with similar institutions in the United States.

Article XIV. Any member of this Society who shall procure a patent for a remedy or instrument of surgery, or who prescribes a remedy without knowing its composition, or who shall hereafter give a certificate in favor of a patent remedy, or instrument, or be guilty of any dishonorable conduct, shall on motion be expelled by a vote of two-thirds, at any regular meeting of the Society.

Article XV. This Society by a vote of a majority of the members present shall have power to levy a contribution upon its members, to meet any necessary expenditure.

Article XVI. Any article of this constitution may be amended at the annual meeting in May, provided three-fourths of the members concur therein.

LIST OF MEMBERS

J. F. Henry	J. D. M. Crockwell
J. F. Sanford	J. D. Elbert
E. R. Ford	H. M. Mathews
J. H. Rauch	D. V. Cole
A. S. Hudson	Nathaniel Steel
D. L. McGugin	J. M. Witherwax
James W. Flint	G. Anderson Hull
E. Lowe	J. W. Brookbank
G. R. Henry	E. D. Hansom
J. F. Dillon	Charles Cutter
J. B. Latta	A. F. Bruning
W. F. Grubb	C. G. Blood

BY-LAWS

Article I. The Society shall appoint at least one person to deliver a dissertation at the next meeting, and if such person be not present, the secretary shall advise him of his appointment.

Article II. It shall be the privilege of any mem-

ber of this Society to report at the regular meeting thereof, any important cases that may have come under his observation.

Article III. The secretary shall give four weeks' notice in the public papers of the state, of the time and place of each meeting.

CODE OF MEDICAL ETHICS

Rule 1. It is the duty of every medical practitioner to treat his patients with steadiness, tenderness, and humanly, and to make due allowance for that mental weakness which usually accompanies bodily disease. Secrecy and delicacy should be strictly observed in all cases in which they may seem to be particularly required.

Rule 2. The strictest observance of temperance cannot be too strongly inculcated in the minds of the practitioners of medicine and surgery; a clear and vigorous intellect and a steady hand being absolutely necessary to the successful practice of those branches of medical science.

Rule 3. Unfavorable prognostications should never be made in the presence of patients; yet should there seem immediate danger it becomes the duty of the medical attendant, to apprise the patient's friends of that circumstance.

Rule 4. In every instance in which one physician has been called to visit the patient of another, a consultation with the former medical attendant should be proposed. Consultations in difficult cases should always be recommended; and the physician called for that purpose should always pay the greatest degree of respect to the practitioner first employed, and allow him the privilege of delivering all the directions agreed upon.

Rule 5. When one physician is called to visit the patient of another in his absence, or during short indisposition, he should not manifest a wish to continue his attendance any longer than the physician

first called on should be able to resume the charge of the case, unless a continuance of his services should be expressly wished by the patient or his friends.

Rule 6. The junior physician in attendance should always deliver his opinion first, the others according to seniority, or in the order of attendance, and a majority should decide; but in event of a tie, the physician first in attendance should give the casting vote in regard to the future treatment, and to him should be entrusted the future management of the case, unless the patient or his relatives should object to his being continued.

Rule 7. Although the possession of a diploma honorably acquired, furnishes presumptive evidence of professional ability, and entitles its possessor to pre-eminence in the profession, yet the want of it should not exclude practitioners of experience and sound judgment, from the fellowship and respect of the regular graduate.

Rule 8. In consultation, punctuality in meeting at the same hour should be strictly observed; but the physician who first arrives should wait a reasonable length of time for the arrival of others. A minute examination of the patient, however, should not take place, until one or more of the medical attendants are present, except in cases of emergency. All subsequent visits should, if practicable, be made by mutual agreement, and no medical discussion should take place in the presence of the patient.

Rule 9. Attendance on members of the profession or their families should always be gratuitous, but they should not be officiously obtruded. Should the circumstances of the medical practitioner indisposed enable him to make a recompense for medical services rendered to himself, his wife or family, it is his duty to do so, especially if he resides at a distance.

Rule 10. When one medical practitioner is called to visit a patient whose recovery has been despaired

of by the physician first in attendance, and the disease should afterwards terminate fatally under his management, he should avoid insinuating to the friends of the deceased, that if he had been called a day or a few hours sooner, he could have effected a cure. Such a course of conduct is reprehensible, and empirical in the extreme, and in the event of the patient's recovery, such a person should not assume all the credit, as the case might have been partly effected by the medicine prescribed before he took charge of the case.

Rule 11. The use of nostrums and quack medicines should be discouraged by the faculty, as degrading to the profession, injurious to the health, and often destructive of life. Should patients laboring under chronic complaints obstinately determine to have recourse to them, a reasonable degree of indulgence should be allowed them by the physician; but it is his sacred duty to warn them of the fallacy of their expectations, the dangers of the experiment, and the necessity of strict attention to the effect produced by them, in order that their bad effects, if any, should be timely obviated.

Rule 12. No physician should either by practice or example, contribute to the circulation of a secret nostrum, whether it be his own invention, exclusive property, or that of another. For if it be of real value, its concealment is inconsistent with beneficence and professional liberality, and if mystery alone gives it value and importance, such craft implies either disgraceful ignorance or fraudulent avarice.

Rule 13. In all cases where diversity of opinion and opposition of interest give rise to controversy or contention between two or more members of the profession, the decision should be referred to a sufficient number of physicians, as they are frequently the only persons in the community capable of properly estimating the merits of the dispute. But neither

the subject litigated, nor the decision thereon should be communicated to the public, as individual reputation might suffer, and the reputation of the profession generally be injured.

Rule 14. A wealthy physician, or one retired from practice, should refuse to give gratuitous advice, unless the danger of the case (the absence of the practicing physician) or the poverty of the patient, should warrant him in so doing. In all cases where he may be preferred, he should recommend a consultation with some one in active practice. This rule should be strictly observed, as a contrary course is gratuitously depriving active industry of its proper reward.

Rule 15. When a physician is called on suddenly to visit the patient of another, in consequence of some unexpected or alarming change in the symptoms, he should adopt a temporary treatment suited to present circumstances. He is not warranted in interfering afterwards, unless requested to take charge of the case, when he should propose an immediate consultation with the physician previously employed.

Rule 16. When from any circumstance unforeseen at the time, rendering it impossible for a physician to meet his appointments with very ill or dangerous cases, he should call on some respectable practitioner and request him to visit the case. The physician paying such visit making no charge against the patient, but allow the attending physician to make all the charges.

Rule 17. When a physician calls a counseling brother in a case he deems critical, without the consent or advice of the patient or his friends, but strictly with his own desire and wishes, the consulting physician in such cases should not make a charge specially, but leave it optional with the one attending, who should feel himself bound to remunerate him in certain cases, viz., when it is at a dis-

tance, and the patient being able to meet fully all claims against him.

Rule 18. Attendance on clergymen who live by the ministry, should always be gratuitous unless the clergyman is in the habit of encouraging quackery, by his certificates, or any other means, and in this case, it shall be optional with the physician to render a bill, or not.

Rule 19. A member who violates any of the rules of this code, shall be liable to expulsion on conviction thereof.

The first session was held on June 19, 1850. The second session in Fairfield on the first Wednesday in May, 1851. From this date to 1867, we have no record of the place of meeting except that the session of 1867 was the fourth meeting in Davenport.

We have No. 12—Volume I—1854, of the Iowa Medical Journal and in the index it is noted that on page 320 an account was given of the meeting of the Iowa State Medical Society.

We pass on to 1867 when the Iowa State Medical Society met at the Council Chamber in Davenport, May 22, 1867 at 10:00 o'clock A. M., the attendance "being fair." The president of the Society, Dr. J. W. H. Baker, took the chair and called the meeting to order. At the request of the president, prayer was then offered by Rev. S. M. Anderson of the Presbyterian Church.

Dr. T. J. Saunders on behalf of the president of the Scott County Medical Society—Dr. T. J. Iles, whose health was impaired—received the delegates from abroad, in the following address of welcome.

Gentlemen of the State Medical Society:

Upon this, our seventeenth anniversary, the duty devolves for the fourth time upon the fraternity of Davenport to extend to you the hand of cordial and sincere greeting.

If any there are in this assemblage, who, half a generation ago, had the honor of being at the first meeting of the State Medical Society of Iowa, the fact, probably, will be recognized, that a comparatively new set of actors occupy the stage, sadly reminding in the words of one of our gifted poets, that

"Art is long and time is fleeting,
And our hearts though stout and brave;
Still, like muffled drums are beating
Funeral marches to the grave."

Though many devoted pilgrims in the ranks of our noble calling have stepped aside and are seen of men no more, yet, the science of medicine remains, and with each succeeding year gathers unfaded laurels. Its votaries of the present day can be numbered by thousands, strong and united, enclosing and exercising as with a giant's power, a large share of the rapidly developing intellectuality of this most remarkable century. He who thinks we are only perpetuating a relic of antiquity, giving it neither vitality, nor form, nor comeliness, in accordance with the spirit of the age, is involved in worse than darkness, respecting our aims and accomplishments.

As living, active, energetic members of the profession, to us, in connection with our brethren throughout our widespread country, comes the duty of sustaining and advancing by all means at our command, that prestige of potency which has always attached to the regularly constituted guardians of life and health. With the spirit predominant, of each one casting in his mite, and full of trust that, like bread thrown upon the waters and gathered after many days, beneficial results to our organization shall be

reached eventually, let us enter upon the transaction of such business as may come before us; and the hope is fervently entertained that, when the conclusion arrives, the remembrance of your stay with us may be accompanied by no emotion adverse to those of satisfaction and pleasure.

The eighteenth annual session convened in Des Moines, Wednesday, February 5, 1868, Dr. Wm. Watson of Dubuque, president. There were twenty permanent members present and nineteen new members were elected, making a total of thirty-nine members present at the annual session of the Iowa State Medical Society at its first meeting in Des Moines. From Dubuque there was one; Fort Madison, two; Des Moines, seven; Davenport, two; Burlington, two; Ottumwa, two; Keokuk, five; Iowa City, four; Unionville, one; Tama City, one; Blakesburg, one; Winterset, three; Panora, one; Chariton, two; Adel, one; Hartford, one; Durand Station, one; unable to locate two.

The contract was let to Dr. J. C. Hughes to publish the transactions of the meeting for \$108.

Officers elected at the meeting were as follows: President, Dr. Philip Harvey, Burlington; vice-president, Dr. J. W. H. Baker, Davenport; recording secretary, Dr. A. G. Field, Des Moines; corresponding secretary, Dr. J. Williamson, Ottumwa; treasurer, Dr. M. B. Cochran, Davenport; censors, Dr. H. L. Whitman, Des Moines; Dr. Wm. Gutch, Blakesburg; Dr. William Voght, Iowa City; Dr. S. B. Thrall, Ottumwa, and Dr. G. R. Henry, Burlington.

Delegates to the American Medical Association: Drs. J. C. Stowe, Burlington; Wm. Wat-

son, Dubuque; A. G. Field, Des Moines; W. F. Peck, Davenport; U. Steel, Fairfield; J. C. Schrader, Iowa City; Wm. Corns, Tama City; Dr. Hutchinson, Winterset; S. B. Thrall, Ottumwa and J. C. Hughes, Keokuk.

This being the first session of the Iowa State Medical Society held in Des Moines, we take the liberty to abstract some of the most important measures adopted and as far as possible outline the spirit manifested at that time. A little more than fifty years have elapsed and all the actors have passed away, except one—Dr. A. G. Field—who happily remains watchful of the events as they pass and who still has a just appreciation of the accomplishments of the profession at home and abroad. Such blessings fall to but few, particularly those who have been active participants in professional advancement for more than sixty years.

The Iowa State Medical Society met in the hall of the Good Templars in the City of Des Moines on Wednesday, February 5, 1868, at 10:00 o'clock, A. M. President Wm. Watson of Dubuque in the chair. Prayer was offered by Rev. H. S. De Forest. Dr. H. L. Whitman, president of the Polk County Medical Society "welcomed the members from abroad in an appropriate and well received address."

The afternoon session convened at 2:00 o'clock when President Wm. Watson proceeded to deliver his address. A communication from Dr. M. B. Cochran stated that as treasurer he had in his hands \$231.50 belonging to the Society. The report was referred to a committee consisting of Drs. Williamson, Carpenter and Baker.

The committee on order of business consisting of Drs. W. F. Peck, J. C. Hughes and Wm. Watson recommended "that a bill be drafted to restrain the impositions of quackery in this state; also a bill to prevent criminal abortion." On motion Drs. Wm. Watson, A. C. Moon and W. F. Peck were appointed to draft a bill to restrain quackery, and Drs. Ed. Whinery, Wm. Watson and H. L. Whitman were appointed as a committee to draft a bill to prevent criminal abortion.

The committee reported articles of incorporation and a petition of the Society to the General Assembly, asking that body to recognize the Society as a legally incorporated body.

ARTICLES OF INCORPORATION

Article I. Know all men by these presents: That we, Edward Whinery, J. W. H. Baker, William Watson, Seneca B. Thrall, A. G. Field, and H. L. Whitman, persons of full age, and citizens of the State of Iowa and of the United States, hereby associate ourselves, our associates and successors, for the purposes, hereinafter stated; and become incorporated as a body politic and corporate under the name and style designated below, claiming all the rights, powers, immunities, and privileges, created, granted, and conferred by the virtue of Article Three (3), Chapter Fifty-five (55), of the Revision of 1860.

Article II. The name by which said body corporate or Society shall be known in law is, the Iowa State Medical Society.

Article III. The business and object thereof shall be the promotion and elevation of medical science in the State of Iowa, the advocacy of such measures as will tend to alleviate the sufferings of humanity, improve the health, and protect the lives of the community.

Article IV. The business of the Society shall be conducted, and its annual meetings held, at Des Moines, Polk County, Iowa.

Article V. The affairs and business of said Society shall be conducted by seven trustees, to be annually elected by the members of said Society, at such time and manner as provided by its by-laws.

Article VI. The names of the trustees of said society for the first year shall be Edward Whinery of Ft. Madison; J. W. H. Baker, of Davenport; William Watson, of Dubuque; S. B. Thrall, of Ottumwa; and A. G. Field, and H. L. Whitman, of Des Moines.

In witness whereof we have here written our names this 6th day of February, A. D., 1868.

First Congressional District, Edward Whinery.

Second Congressional District, J. W. H. Baker.

Third Congressional District, William Watson.

Fourth Congressional District, S. B. Thrall.

Fifth Congressional District, A. G. Field, and H. L. Whitman.

State of Iowa, Polk County, ss.

Before the undersigned, a notary public in and for said county, personally came the above named Edward Whinery, J. W. H. Baker, Wm. Watson, S. B. Thrall, A. G. Field, and identical persons whose names are subscribed to the foregoing certificates of incorporation as corporators, and acknowledged the execution thereof to be their voluntary act and deed, for the purposes therein stated. Witness my hand and notarial seal this 6th day of February, A. D., 1868.

F. M. HUBBELL,

Notary Public, Polk County, Iowa.

Dr. Peck moved that the articles of incorporation, with the petition of members of the Society, be presented to Dr. J. M. Robertson, a member of the state senate, and also a member of this Society, with the request that he would present

them before the general assembly, and take such action as is required by law, to render the Society a body corporate according to law—motion carried.

In relation to the publication of the transactions the following resolution was adopted:

Resolved, That the committee on publication be requested to confer with Dr. Hughes, in relation to the practicability of publishing the proceedings of the Iowa State Medical Society, and providing that a reasonable contract can be agreed upon, the committee are authorized to appropriate the requisite amount from the treasury of the Society, not to exceed one hundred and twenty-five dollars.

In compliance with the above resolution, we conferred with Dr. J. C. Hughes, who proposed to publish in the Iowa Medical Journal the proceedings in an acceptable manner, for one dollar and fifty cents per page, at which rate he has caused to be published seventy-two pages of the proceedings of last meeting, amounting to one hundred and eight dollars."

We therefore respectfully recommend that Dr. Hughes be paid the above amount of one hundred and eight dollars, and that an order on the treasurer be drawn for that amount.

(Signed) A. G. FIELD, Chairman,
J. WILLIAMSON,
A. M. CARPENTER.

At the afternoon session on the last day the following recommendation was adopted in relation to the entertainment of the State Society by the Polk County Medical Society.

It was announced that the members of Polk County Medical Society had provided for an entertainment of the members of the Iowa State Medical Society, to be given at nine o'clock this evening, and tickets of admission were distributed. There being

no further time for the report of standing committees, or the appointment of new ones, Dr. Cleaver moved that the president be authorized to appoint, after the adjournment of the meeting, new committees to fill all vacancies that have occurred in the proceedings of this meeting. Carried.

Resolved, That while our thanks are due to the members of the Polk County Medical Society, for the provision for our entertainment on the occasion of this, our first meeting in the City of Des Moines; yet, as we are to continue to meet annually in this city, and as the tendency is to an unnecessary expenditure of money, and to consume time too valuable to be thus employed, we advise them to refrain from such preparations or entertainments in the future.

That the dignity of the profession might be conserved. Dr. J. Williamson offered the following resolution:

Whereas, a member of this Society is engaged in selling a patented instrument known as the Babcock's uterine supporter, in violation to the code of ethics of this Society, and derogatory to professional character. Therefore, resolved that this Society express its disapproval and condemnation of such conduct. Adopted unanimously.

The following named members upon motion were appointed to determine upon a design for, and to procure a seal for the Society before the next annual meeting: Drs. A. G. Field, A. M. Carpenter and Wm. Watson.

The Society placed itself on record in relation to medical education by adopting the following resolution:

Resolved, That the system of medical college instruction agreed upon in the convention in Cin-

cinnati, May 3, 1867, and recommended to the medical colleges throughout the country for their adoption, meets our hearty approval, and we earnestly desire to see the same adopted in every medical college in the United States."

Perhaps the sentiments of the profession in 1868 may best be reflected by quoting a part of the able and interesting address of Dr. Wm. Watson, for many years one of the most aggressive and most conservative members of the Society.

Our Society has done much good by promoting acquaintance and awakening cordial friendship among professional men residing in distant sections of the state, an acquaintance that was of great importance in organizing to perform the part assigned to the profession in the stirring events of the past six years. It can be said without boasting, or fear of contradiction, that the profession of no western state have left a better record, or have been more faithful and untiring in the discharge of duty. The annals of every bloody field chronicle the heroic deeds of Iowa soldiers. So do the records of positions requiring executive ability, judgment, integrity, and professional skill, show a prominent list of names taken from the "Iowa Surgical Staff," while the honored names of Reeder, Witter, McGugin, Fiske, and others are among Iowa's martyred heroes.

The existence of this Society has infused new life into some old, and stimulated the formation of many new, local societies. It has also secured the preservation of the records of many important cases and facts. From a careful examination of the past, with a full appreciation of the difficulties encountered, the results appear eminently satisfactory.

One great difficulty of the past, now partially removed and rapidly disappearing each succeeding year, has been the want of direct, speedy, and eco-

nomical means of communication between different sections of the state: another has been the migratory character of the meetings, which has resulted in but a limited number of the same men being brought together at successive meetings; yet, notwithstanding these unfavorable influences, it has made substantial progress in the accomplishment of its objects, and every friend of the thorough organization and progress of the profession should give it his cordial support, and determine with renewed energy, that succeeding years shall be characterized by more marked results than the past. As I have remarked, a survey of our present position as a state organization, with a view to its future action and influences, reveals much to stimulate and encourage us. It also discloses well founded claims to sympathy, and assistance in our voluntary labors, the results of which, if judiciously employed, will be of decided benefit to the state.

In addition to the increased and rapidly increasing facilities of communication, the tendency of recent events has been to greatly extend the acquaintance of many members of the profession, and awaken a common interest among those engaged in kindred investigations which cannot fail to excite to increased diligence in observing, and accuracy in recording the results of their observations.

While serious obstacles to our progress have been overcome there are others still existing which require earnest, continued efforts for their removal. Some of these pertain directly to the profession, and the remedial influence must be exerted directly upon its members, by creating a sentiment among them which shall be sufficiently powerful to bring all who aspire to an honorable position up to its standard of professional integrity. I am aware there are croakers and old fogies who will maintain such expectations are Utopian and never to be realized. I think any intelligent observer who has watched the prog-

ress and success of the efforts of the American Medical Association for the past twenty years will anticipate more favorable results; besides, these croakers are usually those who have seldom attended a meeting, unless it came to their doors, and are not active members of any medical organization. There is another class of difficulties which pertain more directly to the people, and so far as they involve the rights of the uneducated, the afflicted, and the helpless, they are proper subjects for legislative action.

Another subject which is worthy of the attention of our law-makers, is the establishing of some system of collecting and preserving the vital statistics of our state, by a general and uniform registration of births, marriages and deaths, with the essential facts pertaining to each. The importance of such a provision will become more apparent as we increase in population and wealth, and upon the ground of self-interest alone.

Many cases involving this subject already exist in the older states, and many more are sure to arise among our foreign-born citizens. The laws of England determining the descent of property recognizes the right of every child born alive, and our laws on this subject are modeled after theirs.

But independently of the advantage resulting directly or indirectly to individuals, when we reflect that a healthy able-bodied adult population are essentially "the state," and the more perfect and numerous are the models in this respect, among her people, the greater are possessions of the real elements of wealth and power, we shall fully realize that it is the duty of the government to know how nearly her population approaches the highest standard; also, to use every means in her power to promote the most healthy and efficient conditions of her people. The ability to determine clearly the relative fecundity and mortality of her people; the relative proportion of the sexes among her popula-

tion; the longevity of her citizens; the causes of deaths within her borders; the weight with which each cause of death within her borders; the weight with which each cause of death acts upon different portions of the community, whether considered in relation to age, sex, or condition, or in relation to different sections of her territory; these and many other facts to be derived from the same data are indispensable to a correct application of the principles of social and political economy.

A serious hindrance to the prosperity and more extended usefulness of this Society in the past, has been the difficulty and expense of publishing the contributions and material collected in the form of an annual volume of transactions. Their present value as a contribution to science would be creditable to the profession, as many unique, interesting, and valuable cases have been reported by members of this Society. The future worth of such contributions in aiding the demonstrations of the healthfulness of our climate, and its peculiar exemption from some types of disease, would be exceeded by their scientific value, which as a state and a people we are under a sacred obligation to contribute to the sum of human knowledge, as a partial recompense for the benefits we derive from the labors of others.

But beyond and aside from this as they would come extensively to the notice of medical men, they would possess a practical value, and exert an influence in adding to the population, intelligence, and wealth of the state far beyond an equal expenditure of money in any other form, and thus gives this Society a strong claim not only on the sympathy but material assistance of the legislature in placing in a permanent form the result of their voluntary labors. The apparent want of a correct understanding and appreciation of the true position of the profession in relation to the real and assumed progress of medical science has often proved a source of annoyance to

many of its members. It is true some well-meaning persons are influenced by the common cant, "that the medical profession are opposed to improvement and progress," because they do not at once adopt and endorse every vague theory the visionary and enthusiastic desire to thrust upon them but every candid observer of the progress of medicine cannot fail to note the earnestness of research and cautious reserve with which new theories and novel remedies have been scrutinized before adoption.

Following the eighteenth session of the Iowa State Medical Society held in Des Moines in 1868 when the Society seemed to have reached a period of full development and had become an incorporated body the meetings followed one after another in regular order with only the ordinary disagreements incident to such bodies and which contribute to progress, (the transactions may be found in the published volumes), various measures were adopted favoring legislation in the direction of securing a health board organization and certain needful legislation relating to the practice of medicine and the advancement of medical education. These activities bring us to the year 1901.

The fiftieth annual session was held in Davenport, May 15, 16, 17, 1901, and was the beginning of a new era in the history of the Society. On the first day of the session Dr. W. J. Findley of Sac City presented a series of resolutions looking to the organization of auxiliary medical societies by districting the state. The discussion on these resolutions brought out the fact that a reorganization plan was being considered by the American Medical Association and that it would be desirable for the Iowa State Medical Society to adopt

a constitution and by-laws in conformity with that of the national association. A new committee was therefore appointed consisting of Dr. D. S. Fairchild, Clinton, chairman; Dr. W. J. Findley of Sac City and Dr. Van Buren Knott of Sioux City, to report as soon as practicable. At the fifty-first session, 1902, the committee, through its chairman, Dr. D. S. Fairchild, read a preliminary report on constitution and by-laws and stated that it was the general outline of the new constitution, the committee was unable to make a full presentation of the details as the American Medical Association had not completed its plans for uniformity of organization for state societies; and therefore recommended that further consideration of the report be deferred for one year.

The fifty-second annual session convened at Sioux City, April 15, 16, 17, 1903, at which time Dr. Van Buren Knott in the absence of the chairman read the completed constitution and by-laws, which were adopted although objections were urged on the ground that the final draft differed from the preliminary report of the year before. The objections were overruled on the ground that the matter had been before the Society for two years and that action the previous years was deferred pending the completion of certain details which would bring the constitution and by-laws in conformity with the plan matured by the American Medical Association and which had been adopted by many other states.

Following the Sioux City meeting a spirited controversy was maintained regarding the constitution and functions of the House of Delegates,

and the relation of county societies and the councillor system. It was alleged that the plan was un-American and dangerous to the welfare of the profession depriving members of individual right and was autocratic.

The opposition came largely from those interested in medical politics. During the year six counties withdrew from affiliation with the State Society. At the fifty-third annual session held in Des Moines, May 19, 20, 21, 1904, the question of the legal adoption of the new constitution and by-laws came up on a resolution introduced by former members from Dubuque county and on a referendum vote of the Society the matter was referred to a special committee, which by unanimous vote held that the new constitution was legal and binding. The committee report was adopted by a vote of two hundred to six.

The fifty-fourth annual session in 1905 convened under the new organization with all the county societies in affiliation except six. In two counties, Dubuque and Clinton, the county societies had incorporated and new societies were organized for State Society affiliation, found it necessary to adopt new names and on application were admitted to State Society membership under the new name. In the course of time the opposition to reorganization ceased to exist except in a few individual instances and the new county organizations were abandoned. The four counties which refused affiliation finally applied for membership and were admitted. The unrest of the opposing members of the State Society found relief by proposing amendments to the constitution and by-laws, but none were adopted which in any

material way conflicted with the general plan of organization. The changing conditions and added experience under the new plan made several amendments necessary which were adopted in good spirit.

In 1907 the State Society adopted a plan of legal protection against malpractice suits under the direction of a committee consisting of Dr. D. S. Fairchild, Dr. L. W. Littig, and Dr. J. M. Emmert.

The same committee was authorized to investigate and report a plan of journalizing the proceedings and in 1905 the Society contracted with the editor of the Iowa Medical Journal, Dr. E. E. Dorr, to publish the transaction of the State Society. At the expiration of this contract in 1911 the State Society adopted a journal of its own and elected Dr. D. S. Fairchild of Clinton, editor. The committee above referred to was appointed in 1904 to report on a plan of medical legal protection, a plan of journalizing the papers and transactions of the State Medical Society and in view of the enlargement of the functions of the Society to present new articles of incorporation. It may safely be said that the Iowa State Society is one of the best organized societies in the United States.

LOCAL MEDICAL SOCIETIES

PART SEVENTH

In almost every instance the earlier records of local medical societies have been lost but it was our good fortune in 1875 to secure from the recollections of early physicians then living and from records still preserved, sufficient data to form a rather complete record of many of the earlier local medical societies.

The first organizations were in most instances short lived because of the character of their membership, nearly one-half of the physicians practicing in Iowa in 1850 were not medical graduates, some of them had never attended a regular medical college, their equipment was a service in a hospital as a hospital steward or as an assistant to a surgeon during the Civil War. The men of the latter class were not familiar with any code of ethics save a code that would bring practice and were disturbing elements, nevertheless a liberal spirit on the part of the better class of physicians led to the belief that society fellowship would inspire better feeling and to possible higher qualifications. This was true in many instances for some uneducated practitioners sought to improve themselves by following the example of the qualified members and not infrequently attending medical schools which were willing to receive them.

After the failure of this first medical society organization reorganization followed in a few years with a more carefully selected membership and in some instances several reorganizations followed with progressively better results.

When the twenty-five Iowa pioneer practitioners of medicine gathered in Burlington, Iowa, June 19, 1850, for the purpose of organizing a state medical society, it was in response to a firm belief in the minds of a few broadminded physicians with a view to the future, that organized medicine was the only means of progress and to higher educational standards on the part of the profession and greater benefits to the state and the people generally. Money standards were not altogether the standard of success in that day and to the great credit of the profession, it has never been so even in these latter days of money insanity.

It soon became apparent that formal annual meetings of state societies would not keep alive the spirit of organization, and that informal meetings of nearby physicians at frequent intervals was essential to maintain the larger interest in the state medical society. Another feature of importance was the social influence of the gathering of neighboring physicians, establishing more friendly and more sympathetic relations, which would not only advance the interests of the physicians themselves, but the interests of the people of the communities, which were so dependent on the medical profession in time of need.

It was this feeling of common welfare that the physicians of Keokuk under the lead of Dr. John F. Sanford met at Dr. Bond's office in October, 1850, to form the first local medical society in Iowa. The first record of this Society appears in the first volume of the Iowa Medico-Chirurgical Journal of 1850, which reads as follows: "For the purpose of organizing a city medical society

the profession met at the office of Dr. Bond, October 3, 1850; Dr. J. F. Sanford in the chair." It appears that a previous meeting had been held and had adjourned to meet on the aforesaid October 3. The association was called "The Medical Society of the City of Keokuk;" to hold its regular meetings quarterly. Membership was limited to members of the regular profession, of good character, and practicing in the City of Keokuk.

The officers elected were Dr. J. Millard, president; Dr. J. Haines, vice-president; Dr. E. R. Ford, secretary and treasurer; Dr. M. F. Collins, librarian, and Drs. J. L. McGugin, J. F. Sanford and B. H. Bond, censors. This was the beginning of the Lee County Medical Society.

The leading position occupied by Keokuk in the medical history of Iowa in the earlier years, required of the writer a careful search of available sources of information touching the activities of the profession in the city which promised so much before the extension of railways into Iowa.

Through the preservation of the first volume of the "Western Medico-Chirurgical Journal" by Dr. Frank Fuller, a few copies of its successor the "Iowa Medical Journal" from Dr. J. C. Hughes' library, and the researches of Dr. F. B. Dorsey, we have been able to place before the profession much of interest regarding medical Keokuk. Dr. Dorsey has prepared for this record the following outline of the history of the Keokuk Medical Society and Lee County Medical Society, including an account of the activities of the Keokuk profession during the Civil War.

THE EARLY HISTORY OF THE KEOKUK MEDICAL SOCIETY

The first meeting of Keokuk physicians for the purpose of organizing a medical society, was held at the office of Dr. Bond September 26, 1850. There were present at this meeting Drs. Millard, Bond, Collins, McGugin, Sanford, Heminway, Galland, Haines and Ford.

Dr. J. F. Sanford was chosen president and Dr. E. R. Ford secretary and treasurer. The constitution was drafted and adopted October 3, 1850, and signed by the following physicians: Drs. J. Millard, D. L. McGugin, M. F. Collins, Heminway, B. N. Bond, E. R. Ford, J. Haines, J. F. Sanford, Samuel G. Armor, Isaac Galland, and A. S. Hudson.

The first regularly elected officers were Dr. J. Millard, president, Dr. J. Haines, vice-president, Dr. E. R. Ford, secretary and treasurer, Drs. D. L. McGugin, J. F. Sanford, and B. N. Bond, censors.

A code of medical ethics, constitution and by-laws were arranged for to come up at the next meeting, and that an arrangement be made to publish the proceedings of the society in the city papers and Western Medical Journal.

The first delegates elected to the State Medical Society were Drs. A. A. Heminway, J. Haines, Samuel G. Armor and M. F. Collins.

The first paper read before the Society was by Dr. Samuel G. Armor, on the subject of "The Therapeutical Effects of Blood Letting."

There were problems and other things similar to those of the present day, annoying the Society, and one of them was the collection of bills. An

endeavor was made by the Society to have one person selected as collector, that settlement should be made semi-annually. If not paid promptly, 20 per cent interest was to be added, and that the members of the Society pledge themselves to refuse all fellowship and intercourse with physicians not complying with the regulations.

Dr. J. C. Hughes became a member of the Society on September 28, 1851. The bill question seemed to be the great disturbing element, and disrupted the meetings for some years. and then pursuant to a call by Dr. McGugin, the next meeting was held on July 27, 1858, at the office of Drs. Allen & Stotts, with the following doctors present: McGugin, Sanford, Letcher, Hughes, Martin, Seyffarth, Parker, Dewey, Rowe, Smith, Potts, Carpenter, and Bond; Dr. McGugin, president; Dr. Bond, secretary.

The object of the meeting was that they might consult upon the best means for protection against imposition by such of the community who habitually neglect or refuse to compensate their medical attendant, and the necessity for united action.

Dr. J. C. Hughes was the first physician to propose the drafting of a fee bill. Drs. McGugin, Carpenter, Wyman and Bond were named as the committee.

The board of education rooms were selected as the place of meeting thereafter. The fee bill was adopted, the charge for ordinary bleeding from the arm fixed at one dollar. Cupping, wet or dry, two to five dollars. Introduction of a seton, two to five dollars.

The advisability of establishing a city dispensary was brought up. The laying of the Atlantic

cable was commented upon in able manner by Dr. McGugin, August, 1858. In October, 1858, the Society began to hold its meetings in the faculty room of the Iowa State University and continued to do so until 1859. The Society then again lapsed until 1864, when it was organized for the third time, February 15, at Dr. R. H. Wyman's office, for the protection and defense of the profession and a revision of the fee bill.

At this meeting were Drs. McGugin, Hughes, Wyman, Carpenter, and by invitation, Drs. Jones, Davis and McDonald, Dr. McGugin, president, Dr. Carpenter, secretary.

Drs. Jones, Davis and McDonald were admitted as members. The fee bill was revised.

The subject of practice of druggists, examining and prescribing for patients was then discussed and condemned, and notices were served on them to discontinue the same or suffer a boycott. The question of druggists retailing spirituous liquors by the drink was discussed, condemned, and efforts made to abate the practice.

On February 22, Dr. H. T. Cleaver and Dr. J. A. Webster were admitted as members of the Society.

During March, 1864, small-pox was prevalent in the city and efforts were made to have the city establish a pest-house. Drs. McGugin, Wyman, McDonald, Cleaver and Carpenter were named as the committee to confer with the city council.

The last meeting during 1864, was held at Dr. Winslow's office on June 21. There were present, Drs. McGugin, Hughes, Davis, McDonald, Carpenter, Winslow and Webster. Dr. A. Weismann was proposed as a member.

The interests of the physicians again lagged, and no meetings were held for the next ten years. Then August 1, 1874, the physicians were called together by Dr. Carpenter on account of the death of Dr. John F. Sanford. At this meeting Drs. G. A. Kuchen and H. A. Olsten were admitted as members.

Up to 1874, diphtheria was prevalent, and was treated by emetics, aconite, vapors of lime, and by liq. potasse locally. The swab was used with carbolic acid and glycerine. Nitrate of silver, carbolic acid and ferro subsulphate in glycerine, with the idea of the early destruction of the exudate. The practice of tearing off the membrane was also prevalent, but even then it was noticed by the best informed and most observant physicians that the attempted destruction of the membrane by these means was useless and harmful, and there was marked opposition to this harsh treatment, local or otherwise. Dr. Collins thus early recognized and mentioned cases of diphtheria where no membrane or exudate could be discovered.

In noticing the proceedings of these old time physicians, we hazard nothing in the modest utterance that they would compare very favorably with that of any body of physicians of equal numbers anywhere. They were certainly remarkable and competent men.

IN THE SIXTIES

*"In eighteen hundred and sixty-one,
Oh then it was the war begun."*—Old Song

The geographic location of Keokuk made of it a point of strategic importance at the very begin-

ning of the Civil War, and here was established the first military camp in the state, Camp Ellsworth, in May, 1861. In the same month, the first medical hospital was opened in the Seventh street medical college building, and from this time, until in the year 1865, our city was a busy scene of military activity. Hundreds of soldiers, sick and wounded, were brought from southern camps, and battlefields, and most of the time five large buildings were occupied for hospital purposes. Of the loyal citizens of Keokuk—and nearly all were loyal—none were more so than the medical profession, particularly those composing the faculty of the medical college. The senior of these was D. L. McGugin, M.D., professor of physiology, pathology and clinical medicine, who in October, 1861, went to the front as surgeon of the Third Iowa Cavalry, and remained in active service until 1863, when he resigned on account of ill health. It is said of him, that a "kinder heart never ministered to sick and weary soldier's needs." He had served as a surgeon in the Mexican War, and hence was fitted by experience for the position he filled so well. On his resignation from the service of his country, he resumed his position as a teacher in the college, and, although in greatly impaired health, continued, until shortly before his death, which occurred in 1865. Possessed of an accurate scientific mind, his fifteen years of medical teaching, leaves a memory undimmed as time goes on.

J. C. Hughes, A.M., M.D., was at the outbreak of the Civil War, already the most noted surgeon in the state; his connection with the medical college dating from 1850. The great war governor,

Kirkwood, early in 1861, appointed him surgeon general of the state, and he organized the army hospitals here, and had charge of them until they passed under the control of the general government. The opportunity was here afforded Dr. Hughes to add to his already vast experience as a surgeon, and he became widely known as a careful, rapid and successful operator, and one who always conserved first, the best interests of his patients. Following the war, he devoted his time to the college and his constantly increasing surgical practice until within a few months of his death, which occurred in 1881. Many of the practitioners of the Middle West today are ready to attest the skill in operation and the earnest, incisive method of teaching of Dr. Hughes.

H. T. Cleaver, M.D., came to Keokuk in 1862 to take charge of the Estes House Hospital for the U. S. Government, and remained in this position until the close of the war. The Estes House was the largest of the five, and most of the time ten assistants were required to properly care for the patients. The same year, 1862, the Doctor was elected to the chair of obstetrics and diseases of women in the college, and this connection he maintained until 1883, when he resigned on account of failing health. In the administration of the affairs of the hospital entrusted to his care, Dr. Cleaver was unswerving in his fidelity to the trust, and the kindly interest manifested to patients in his invariable daily bedside visits, endeared him to every one that was an inmate of the Estes House in those terrible years. As a medical teacher, he was very popular with the students, dignified and courtly, yet always genial,

and easily approached; clear and incisive in his method of imparting instruction; outspoken in his abhorrence of pretense; the impersonation of ethics in the broadest sense of the word, he easily became the ideal of every student. He continued in practice after the war, until his death in 1888, a prince among men, a physician of the old school.

Col. Morse K. Taylor, a surgeon of the regular army, was sent to take general charge of the hospitals in Keokuk, in the autumn of 1861, when they passed from the control of the State of Iowa, to that of the United States.

At this time Dr. McGugin had gone with his regiment to the "front," and Dr. Taylor very acceptably filled the chair of physiology and pathology in his absence; this he continued to do until Dr. McGugin's return in 1863. Dr. Taylor was noted for his strict observance of army regulations, and his painstaking efforts to interest. Of somewhat haughty demeanor, his relations with his associates were never very cordial.

He continued in the army medical service at various army posts, until his death, which occurred about 1885. At one time after leaving Keokuk, he was connected with the medical department of Lind University, Chicago, now the Northwestern University Medical School, as professor of physiology.

Edward F. Clapman, M.D., came to Keokuk in 1861, to fill the chair of anatomy, made vacant by its previous occupant going to the military field. Dr. Clapman was a notable teacher, and aroused the greatest enthusiasm in his classes. He continued in the faculty for seven or eight years, and acquired a large general practice, and held the

confidence of his clientele. He was exceedingly popular, socially, and was a man of high educational attainment. An accomplished performer upon the piano; a musical composer of merit; genial and prepossessing in manner, he was possessed of hosts of friends, and warmly welcomed everywhere. He died in New York City about 1894.

Abel C. Roberts, M.D., came to Keokuk from Ft. Madison, in 1862, as a contract surgeon, and took charge of one of the government hospitals. His reputation as a thorough going practitioner of medicine had preceded him, and he was at once elected to the chair of principles and practice of medicine in the medical college. In this position he displayed remarkable ability, delivering two courses of lectures that were considered models of completeness and scientific accuracy. Commissioned as a surgeon of the 21st Missouri, went to the field of action, and remained with his regiment until mustered out in 1866.

Returning to his home, the doctor resumed his practice in civil life with success, but in consequence of exposure during his army life, he was incapacitated for very active duties, and he assumed the editorship of a daily newspaper, which he filled very creditably. A few years ago he passed over to the great beyond, full of honors, possessed of "troops of friends," and his mantle worthily carried by his son, Dr. F. C. Roberts of Ft. Madison.

A. M. Carpenter, M.D., began the practice of his profession in Keokuk in 1855. Ten years later, 1865, he was elected professor of the theory and practice of medicine in the medical college.

This place he held until 1882, when he resigned to assist in the organization of the College of Physicians and Surgeons of Chicago, delivering one course of lectures there, then removing to St. Louis, Missouri, he was identified with the organization of the Marion Sims Medical College and latterly with the Barnes Medical College, retaining his connection with the last until his death, which occurred in December, 1907. Fifty-two years a practitioner, and forty-two years a teacher of medicine, a record unparalleled probably in the entire Middle West. As a physician, Dr. Carpenter, was possessed of the entire confidence of his patients, merited because of his great skill as a diagnostician.

Dignified in manner, genial and handsome of face, gentle and musical of voice, original in illustration, and eloquent to a great degree in expression, his class rooms were crowded, and he was by far the most popular medical lecturer of his day.

POLK COUNTY MEDICAL SOCIETY

The first local society to be designated a county medical society was organized in Des Moines and called the Polk County Medical Society.

The records of this organization have apparently been lost but through the courtesy of Johnson Brigham, state librarian, we have been able to use certain newspaper accounts of this early society which appears in volume one of Brigham's History of Polk County. Polk County Medical Society was organized October 24, 1851. The Keokuk Society was organized October 3, 1850, but the society was limited to Keokuk City and apparently did not include Lee county. It is fair,

however, to assume that this society was the nucleus of a county society.

Among the early Des Moines physicians was Dr. Pierce B. Fagan who came to Des Moines with P. M. Cassidy and for two years these two pioneers were room-mates and occupied the same office. In 1848, Dr. Fagan was a candidate for state senator on the Whig ticket and Mr. Cassidy a candidate for the same office on the Democratic ticket. It appears to have been a friendly contest, for the issue according to tradition was based on the claim that Mr. Cassidy being a lawyer could be spared but Dr. Fagan as a physician was needed at home to preserve the health and welfare of the people and as the majority of the voters held to this view Dr. Fagan remained at home.

Notwithstanding the rather flippant remarks of the reporter, it is certain that Polk County Medical Society did not die for it appears that Dr. Henry Courtney of Des Moines, was elected president in 1859, and remained an active member until his death in June, 1861. It appears also that Dr. H. L. Whitman was president of Polk County Medical Society in 1868 (when the State Medical Society held its first meeting in Des Moines), "welcomed the members from abroad in an appropriate and well received address."

The call for a meeting of the medical profession of Polk County brought together at the county seat the widely scattered physicians and surgeons of the county and organized them for conference and future harmonious action. Dr. A. Y. Hull of Lafayette, Camp township, was called to the chair and Dr. A. L. Gray was made secretary.

Drs. Cole, Murdock and Plumley were appointed a committee to report a constitution.

Drs. Huntsman, Gray and Collet were named a committee to report a code of ethics by which the society should be governed in practice.

The constitution named the association "The Polk County Medical Society," and fixed upon quarterly meetings at the county seat.

Any regular graduate in good standing could become a member "on presentation of a diploma from any respectable medical college, or a license from any respectable medical society, or upon the recommendation of the board of censors, and the payment of the initiation fee of one dollar."

Any member who should "procure a patent for a remedy or instrument of surgery," or who should prescribe "a medicine without knowing its composition" or who should thereafter give "a certificate in favor of a patent remedy, or be guilty of any dishonorable conduct" was subject to expulsion by a majority vote of members present.

A. Y. Hull was elected president, D. V. Cole vice-president, Dr. Huntsman of Lafayette, secretary and treasurer.

The code of the National Medical Society was adopted until the committee should report on code.

Drs. Cole, Murdock and Collet were appointed a committee to report, at the next meeting, on "the causes that depress the profession in Polk County."

Following is a list of charter members: Drs. Hull of Fafayette, Cole and Huntsman of Fort

Des Moines and Collet, Gray and Plumley of Hartford.

In the "Star" of October 16, an irreverent pen gives an exaggerated suggestion of the difficulty of agreeing upon a code of ethics at that early date. The anonymous writer has seen, during the past summer, enough of the lack of "dignity" to blast the reputation of any set of physicians! He refers to consultations generally ending in a "row," with the use of choice epithets! He hopes the association will persevere in its purpose to elevate the practice.

At the next meeting of the doctors, January 30, 1852, Drs. H. C. Grimmel and J. J. Sanders were elected members of the society: Secretary Huntsman's report denied the public all information as to the causes of depression in the practice, as to the code of ethics reported, and as to fee bill. The fee bill reported was adopted with some revisions. The report on the causes of depression apparently did not satisfy, for the subject was referred to a new committee who were instructed to revise and report.

Dr. Hull, president of the society, read a paper on "The Wants of the Medical Profession." It is interesting to follow this pioneer physician and publicist through his brief presentment.

The preeminent want of the medical world Dr. Hull found to be a "corps of competent physicians, men for whom nature had done much, and who possessed a liberal preparatory and thorough medical education."

Another deficiency noted was "the lack of healthy discriminating tone in public sentiment, to the end that the ability of the competent physi-

cian may be fully appreciated." Too loose reign was given to "medicasters" who were virtually authorized by law "to go forth on their errand of death." Iowa was declared to be one of the states in which the practice was not regulated by law. In his view judicious laws would tend to relieve their crippled profession and save communities from incalculable mischief. Another want was harmony among the members of the profession. "Jars, schisms, strifes, animosities and bickerings" stood as "imperishable monuments of their shame and deep degradation."

"Physicians, of all men, should earnestly cultivate intimate and confidential relations with each other, and the only rivalry that they should countenance should be to see who could become best acquainted with the true science of medicine, and to strive to occupy the highest and most extended sphere of usefulness, in their respective circles." He saw lasting benefits shadowed forth in the new organization.

In the "Journal" of March 4, 1852 appears the long debated "Code of Medical Ethics" adopted by the Polk County Medical Society.

1. It declares for the observance of secrecy and delicacy in the relations of physicians with their patients.

2. It would avoid all visits beyond those necessary to the good of the patient.

3. It deplores gloomy prognostications, or the urging to the importance of one's services, but advises timely notice of danger to the friends and, when safe, to the patient himself.

4. It recommends consultations in difficult and protracted cases.

5. It counsels kindness, and generous allowance for the mental debility of the patient.

6. It was regarded as highly derogatory to the dignity of the profession to resort to public advertising, calling the attention of those afflicted with particular diseases, offering advice to the poor gratis, promising radical cures, publishing cases and operations, etc.

7. When called to see another physician's patient, the code prescribes that the physician should make his prescriptions to palliate or temporarily relieve the patient until the attending physician resumes his charge of the case.

8. It maintains that, ordinarily, the physician called in should make no charge against the patient.

9. It declares that no charge should be made for attendance on another physician's family; but the other physician, if able, should remunerate him as he is able to do so.

10. Comments to the disparagement of another physician's treatment it declares to be "a base violation of (the code of) a gentleman."

The remaining sections are in substance as follows:

11. A physician should not take charge of another's patient, unless in consultation, or on relinquishment of the case, or a due notification that the other's services have been dispensed with. In such case, he should make no reflections on his predecessor.

12. General resume.

13. Consult only with regular physicians.

14. In consultations observe respect for others' judgments.

15. After examination retire for interchange of opinions—consultations to be secret and confidential.

16. Consultation concluded, the consulting physician should attend no more unless solicited.

The paper was signed by A. L. Gray, committee on publication.

Whether this pioneer medical society died of too much code and rate-bill or the subsequent proceedings ceased to interest the press, the fact remains that no further reports of its meetings are to be found in the Star, The Times or the Journal.

DUBUQUE COUNTY MEDICAL SOCIETY

The first district medical society to be organized in Iowa was November 4, 1852 at Dubuque, the organization was finally perfected January 11, 1853.

This society was known as the Northwestern Medical Society and included northwestern Iowa, southwestern Wisconsin and northwestern Illinois. Dr. George W. Richards was elected president, meetings were held monthly. In 1875 there were eighteen members.

LOUISA COUNTY MEDICAL SOCIETY

The Louisa County Medical Society was organized April 24, 1852, at Wapello. At this the first meeting of the society, the following officers were elected: Dr. J. M. Robertson of Columbus City, president; Dr. T. G. Taylor of Wapello, secretary; Dr. J. B. Latta of Grandview, treasurer; Drs. H. T. Cleaver, John Bell of Wapello, and J. H. Graham of Morning Sun, censors. At this meeting a constitution, by-laws and code of

ethics were adopted. It appears that the above named physicians constituted all that were present. At the next meeting, January 19, 1853, Drs. H. Belknap, John Cleaver of Columbus City and A. S. Condon were admitted to membership. Dr. John Bell, Sr., was admitted as an honorary member April 16, 1853, and Dr. W. M. Clark of Columbus City to active membership, and in January, 1854, Dr. B. G. Neal of Columbus City was admitted to membership. Dr. W. A. Colton, Columbus City, May 25, 1855; April 19, 1856; Dr. W. S. Robertson, Columbus City; May 28, 1856, Dr. D. McCaughn of Morning Sun; April 18, 1857, Dr. John Muldoon of Wapello; July 17, 1858 Dr. C. H. Curtis was admitted to membership and April 20, 1861, Dr. S. E. Jones of Grandview was made a member.

WAPELLO COUNTY MEDICAL SOCIETY

The Wapello County Medical Society was organized in 1853 by Dr. C. C. Warden; J. Williamson; W. L. Orr and A. D. Wood of Ottumwa; Dr. J. W. LaForce of Ashland, and Dr. Weir of Agency. President, Dr. C. C. Warden; vice-president, Dr. A. D. Wood; secretary, Dr. J. Williamson.

During the Civil War the society did not meet, and not until 1870 was the Wapello County Medical Society, again reorganized with Dr. W. L. Orr, president; T. J. Douglass, vice-president, and J. Williamson, secretary.

Since this reorganization in 1870 the Wapello County Medical Society has met uninterruptedly.

A. O. Williams.

JOHNSON COUNTY MEDICAL SOCIETY

At the meeting of the physicians of Iowa City to attend the funeral of Dr. John A. Morse in August, 1855 the first steps were taken to form a medical society in Johnson county. It was soon after organized and flourished for many years; until in 1869 dissensions occurred and a division followed which resulted in the incorporation of the society by a respectable part of the membership which formed the dissenting minority. The incorporated society continued its organization while the other finally ceased to exist.

CLINTON COUNTY MEDICAL SOCIETY

No records of the earlier meetings of the Clinton County Medical Society can be found. Some records in our possession show that in 1859 a medical society was organized and that in 1869 it was reorganized and the membership restricted.

MUSCATINE COUNTY MEDICAL SOCIETY

Muscatine County Medical Society was organized on the 16th day of June, 1866 with Dr. A. Ady of West Liberty as president. For a time everything passed off pleasantly but soon interest began to die out and the meetings ceased for lack of attendance. It was however revived from time to time until the 12th of June, 1874, when a reorganization was accomplished under the title of Muscatine Medical Society. Dr. J. W. Robertson was elected president and Dr. H. M. Dean, secretary. The meetings have been held monthly.

MARSHALL COUNTY MEDICAL SOCIETY

The first attempt to form a medical society in Marshall county was in September, 1856 at

Marietta. Then the county seat, and known as the Iowa Central Medical Society with eight members holding quarterly meetings at Marietta. Dr. Elias Fisher was elected the first president and Dr. R. Howe Taylor secretary.

This society maintained a useful existence for three years. Some of its members left for other localities and the society disbanded. After a period of nearly two years another medical society was organized in Marshalltown to which place the county seat had been removed in 1861. "This organization was known as the Marshall County Medical Society and was brought into existence by the convention and organization of the medical gentlemen of the county. It consisted of twelve members who convened together in quarterly meetings until the following year, 1862, when the excitement incident to the call for troops for the Civil War, together with the appointment of some of its members to their respective regiment, caused suspension and finally disorganization of the society.

During the entire war and until January, 1867, no medical society appears to have existed in the county, but on the 12th day of January a convention was held by the physicians of the county and the Marshall County Medical Society was reorganized. Its meetings were monthly, its membership seventeen, "but its organization was premature." Dr. Kierulff says: "That in looking over his records he is reminded of the mountain in 'Æsop's Fables,' which was in travail for several months and finally brought forth a mouse. It was composed of regulars, irregulars, graduates and non-graduates, gentlemen and pugilists

and finally after preferring charges upon each and every member for gross violations of medical ethics and etiquette, it adjourned to meet again to re-organize, making graduation from some regular school as a basis of membership. This last clause is the last but best expression of the seven month's existence of that society, and like the last straw, it 'broke the camel's back,' and the medical profession of Marshall county did not come together until March 31, 1873 when they organized in regular form, a society called the Iowa Central Medical Association, to be composed of such physicians and surgeons as would be admitted to membership in the Iowa State Medical Society.

SCOTT COUNTY MEDICAL SOCIETY

Scott County Medical Society was organized in Davenport, October 18, 1856, nine physicians met for that purpose at the office of Drs. Witherwax and Carter and on October 28, thirteen physicians met at the same place and adopted a constitution and by-laws and the code of ethics of the American Medical Association.

The following officers were elected: President, Dr. Edgbert S. Barnes; vice-president, Dr. Lyman Carpenter; secretary, Dr. J. J. Thomson; treasurer, Dr. James Thistle.

At the first quarterly meeting Drs. Barnes and Sanders were elected delegates to the American Medical Association. At the second meeting April 28, 1857, the members of the Rock Island Medical Society were made honorary members. January 26, 1858, the constitution and by-laws were revised and were again revised in 1855 un-

der the direction of a committee consisting of Drs. W. F. Peck, J. W. H. Baker and J. W. Witherwax.

In 1876 Dr. W. D. Middleton was president, Dr. W. W. Grant, vice-president; Dr. C. H. Preston, secretary and Dr. L. French, treasurer. At this time the membership was forty-three.

MAHASKA COUNTY MEDICAL SOCIETY

The first medical society in Mahaska county was organized in 1856. Dr. S. E. Rienhart, president and Dr. J. T. Hopkins, secretary. When the Civil War broke out the meetings were discontinued. In 1872, a second organization was effected with a constitution and by-laws and subordinate to the state and national associations. This society seems to have maintained a continuous existence. So many of the earlier societies had more or less serious interruptions due in some measure perhaps to a heterogenous mixture of graduates and non-graduates.

THE LINN COUNTY MEDICAL SOCIETY—1859

This society was organized in 1859 at Mt. Vernon by Drs. Love, Ely, Ristine, Carson and Lyon. The meetings were suspended during the war but were revived in 1866. In 1873 its name was changed to the Iowa Union Medical Society which continues as an influential organization with two meetings a year. The present Linn County Medical Society was organized in 1903 as a part of the state and national organization and meets twice a year. The enterprising town of Mt. Vernon has a medical organization known as the Practitioners Club which meets once a month.

NORTH IOWA MEDICAL SOCIETY

In the early years of medical organization in Iowa when the country was thinly settled and physicians few in number, it was the custom for the medical profession to organize by several adjoining societies meeting together for professional fellowship. On June 22, 1859, the counties of Fayette, Allamakee, Clayton, Howard and Winneshiek joined in forming a society known as the North Iowa Medical Society; the meeting was held at McGregor. Dr. Frederick Andros was elected president and Dr. H. C. Martin, secretary.

BOONE COUNTY MEDICAL SOCIETY

A medical society existed in Boone county in 1866 called the Boone County Medical Society. A few meetings were held but owing to a lack of interest on the part of its members it was soon abandoned.

April 21, 1871 a new society was organized called the Boone County Medical Society with fourteen members, Dr. L. J. Allerman was elected president and Dr. A. A. Deering, secretary. Four or five meetings were held and this society followed its predecessors.

In 1874 at a conference between Dr. L. J. Allerman of Boone, Dr. W. S. Schermerhorn of Jefferson and Dr. D. S. Fairchild of Ames a meeting was arranged of the physicians of Green, Boone and Story counties for the purpose of forming a district society, in view of the difficulty of maintaining county societies with the small number of physicians then practicing in these counties. Subsequently, Carroll, Calhoun and Hamilton were added. At the first meeting

held in Boone, Dr. P. S. Moser of Boone was elected president; Dr. W. S. Schermerhorn, Jefferson, vice-president; Dr. Charles Enfield, secretary. This society met semi-annually and remained in active existence until the great reorganization of the medical state and national associations, when its place was taken by the various county medical societies.

COUNCIL BLUFFS MEDICAL SOCIETY

The preliminary meeting for the purpose of organizing a medical society in Council Bluffs, was held at Dr. P. B. MacKay's office July 26, 1869. The meeting was called to order by Dr. Donald Macrae who moved the election of Dr. P. J. MacMahon, chairman. On motion, Dr. Macrae was elected secretary.

A committee consisting of Drs. McKay, Macrae, Malcolm, Stein and Osborne, was appointed to draft a constitution and by-laws.

The preliminary organization adjourned, to meet in Council Bluffs August 2, 1869. When the constitution was presented and adopted by the society, eleven gentlemen, graduates of regular medical colleges, were present. The following officers were elected:

Dr. P. J. McMahan, president.

Dr. A. B. Malcolm, vice-president.

Dr. D. Macrae, secretary.

Dr. P. B. MacKay, treasurer.

Drs. H. W. Hart, H. Osborne, C. C. McGovern, board of censors.

At the August 16, 1869 meeting, a fee bill was adopted. It will be interesting to note that the fee bill adopted August 16, 1869 was in most respects higher than the one in force in 1917.

The constitution provided that this society should be known as the Council Bluffs Medical Society and that its meetings should be held on the evening of the first Monday in each month. The high character of the original membership of the Council Bluffs Medical Society is indicated by the names, which we take pleasure in inserting at this point.

Dr. H. W. Hart, Geneva Medical College, 1846.

Dr. P. B. MacKay, Rush Medical College, 1849.

Dr. Sylvanus W. Baker, University of New York, 1832.

Dr. Donald Macrae, University of Edinburgh, 1861.

Dr. E. P. Russell, University of Vermont, 1866.

Dr. A. B. Malcolm, Harvard University, 1834.

Dr. P. J. MacMahon, University of Louisville, 1846.

Dr. I. Ward Scott, University of Maryland, 1866.

Dr. C. C. McGovern, University of Dublin, 1848.

Dr. Henry Osborne, University of Iowa (Keokuk), 1855.

Dr. Herman Stein, University of Jena, 1849.

At the meeting of the Council Bluffs Medical Society, February 7, 1870, three members were elected delegates to the State Medical Society, Des Moines; Drs. McGovern, Osborne and Hart.

On May 2, 1870, it was moved "that the members present resolve themselves into a vigilance committee for the purpose of securing a better attendance," which was adopted, indicating that even in the earlier days it was difficult to secure a satisfactory attendance of members.

At the October 3, 1870 meeting, Dr. Osborne was fined \$1 for non-attendance and for neglect to bring forward his essay of that evening.

Dr. Macrae at the same meeting, gave notice that Dr. Scott was about to enter into matrimony and leave the society and the city, and moved resolutions, etc.

That the Council Bluffs Medical Society exercised watchful care over the welfare of itinerant quacks is shown by the resolutions moved by Dr. Macrae at the August 7, 1871 meeting, endorsing the action of the "Daily Times" in exposing a certain itinerant quack by the name of Dr. Logan.

At the same meeting Dr. Goff discussed the propriety of the Council Bluffs Medical Society purchasing a microscope, and instructed that a committee correspond with instrument makers with a view of taking definite action on the purchase of a microscope.

The meeting of September 4, 1871 appears to have been devoted to a consideration of what to do with numerous quack doctors that seemed to be infesting Council Bluffs at this time.

At the same meeting, a committee was appointed to confer with the druggists with reference to establishing a more friendly relation with them. At the February 5, 1872 meeting, the committee on the relation of the druggist, made a somewhat lengthy report, closing with two resolutions; one to the effect that the doctors should be trained to their profession, and second, that it was unprofessional for a physician to accept a percentage on prescriptions. This committee consisted of Dr. S. W. Baker, Dr. A. B. McKune and Dr. H. B. Goff.

Dr. Donald Macrae whose term of office as president expired with the August 5, 1872 meeting, proved to be an efficient and active presiding officer. During this year the records show numerous cases of discipline for non-attendance, and suspension of members for non-payment of dues.

At the August 5, 1872 meeting, Dr. S. W. Baker was elected president.

At the August 4, 1873 meeting, Dr. H. Osborne was elected president.

At the August 3, 1874 meeting, Dr. A. B. McKune was elected president.

A special meeting was called for March 15, 1875, to consider the resolutions commemorating the death of Dr. McMahon who had been secretary of the society for two years.

The reading of the minutes of the Council Bluffs Medical Society presents the ordinary work of a healthy and vigorous organization. Certain names, Dr. Macrae, Dr. Lacy, Dr. Baker, Dr. Osborne, and Dr. Barstow, were mostly present, and were active in all the work.

At the October 25, 1885 meeting, the board of censors examined the credentials of Dr. H. B. Jennings, and finding them satisfactory, reported in favor of his election, whereupon the society elected him to membership.

It appears that the meetings of the society were generally held at the doctors' offices.

Dr. J. F. White appears to have been secretary of the society for some years and on account of his skill with the pen and on account of his interest in the profession, made rather interesting reports of the meetings.

At the March 9, 1887 meeting, Dr. Lacy read

a paper entitled "Shall We Quarantine in Cases of Contagious Diseases?" It appears that the society generally approved of such quarantine.

It appears that at the April 13, 1887 meeting, Dr. Jennings was fined 50 cents for failing to read his paper, he being absent.

At the April 27, 1887 meeting, Dr. R. A. Moore was fined 50 cents for failing to be present and read his paper.

At the May 25, 1887 meeting, Dr. Cleaver was fined 50 cents for failing to be present and read his paper.

At the September 14, 1887 meeting, Dr. Barstow was fined 50 cents for failing to be present or send his paper.

At the October 26, 1887 meeting, Dr. Deetken was fined 50 cents for failing to read his paper.

At the February 8, 1888 meeting, a resolution was adopted in favor of admitting foreign medicines and foreign instruments free of duty.

At the May 9, 1888 meeting, the question for discussion was "Resolved that an exploratory incision is necessary in all grave penetrating wounds of the abdomen." The discussion was opened by Dr. Macrae, in favor of such exploratory operation, and Dr. Seybert against it.

At the June 13, 1888 meeting, a committee was appointed to prepare a directory of the profession in Council Bluffs for publication in the *Non-pareil*.

At the July 25, 1888 meeting, Dr. Lacy was fined 50 cents for not being present and reading his paper.

From the records of the August 8, 1888 meet-

ing, it appears that the secretary's salary was \$10 a year.

At the meeting of the Council Bluffs Medical Society held August 12, 1891, it was moved "that the State Board of Medical Examiners be requested to grant no further permits to practice in this county without first communicating with this society and granting sufficient time to make an investigation and report upon the character and fitness of the applicant." The motion prevailed.

At this same meeting Dr. H. B. Jennings was elected secretary in place of Dr. J. F. White who had served as secretary of the society since August 12, 1885. It was principally because of the excellent penmanship of Dr. White that we were able to go over the transactions of six years. The Council Bluffs Medical Society was fortunate in its secretaries in that Dr. Jennings wrote nearly as well as Dr. White.

It is interesting to note here and there through all these years, that the member who failed to present a paper was able and willing to pay his fine of 50 cents.

As time goes on, Dr. Jennings appears to have gained courage and purchased a courser pen, that made the reading more easy.

At the August 9, 1893 meeting, Dr. V. L. Trey-
nor was elected secretary. The moneys collected at this meeting amounted to \$24.50 and the balance in the hands of the secretary August 8, 1893 was \$42.05.

There seems to be some deterioration in penmanship; Dr. White having reached the highest degree of development, Dr. Jennings fell close be-

hind and Dr. Treynor rather excelled in brevity of his reports, but not in his handwriting.

At the May 9, 1894 meeting, a communication was received from the Merchants and Manufacturers Association, tendering their support to the society in securing the meeting of the Iowa State Medical Society in Council Bluffs in 1895.

August 11, 1894, a special memorial meeting was held on the occasion of the death of Dr. Chas. H. Pinney and another memorial was held September 14, 1894 on the occasion of the death of Dr. J. F. White.

August 14, 1895, we find a new name serving as secretary, Dr. F. S. Thomas.

At the August 12, 1896 meeting, Dr. F. W. Dean was elected secretary.

At the December 23, 1896 meeting, a new constitution and by-laws for the society was adopted.

At the August 10, 1898 meeting, Dr. Mary Tinley was elected secretary.

A memorial meeting was held August 14, 1899 on the occasion of the death of Dr. F. S. Thomas.

At the August 10, 1899 meeting Dr. Donald Macrae was elected secretary.

At the meeting of the society held August 13, 1900, Dr. Macrae was elected secretary.

At the meeting of the society held August 5, 1901 Dr. F. W. Dean was elected secretary.

At the regular meeting of the society held August 18, 1902, Dr. J. H. Cole was elected secretary.

A special meeting was held September 26, 1903, on the occasion of the death of Dr. John Green.

At the October 18, 1904 meeting, Dr. J. H. Cleaver was elected secretary.

A special meeting of the Council Bluffs Medical Society was held March 26, 1907, on the occasion of the death of Dr. T. B. Lacey.

A special session of the Council Bluffs Medical Society was called August 15, 1907 on the occasion of the death of Dr. Donald Macrae, Sr.

The Council Bluffs Medical Society is to be congratulated on having a complete record from its organization July 26, 1869 to December 21, 1915, bound in heavy Russia leather and deposited in the public library of Council Bluffs.

DALLAS COUNTY MEDICAL SOCIETY

Dallas County Medical Society was organized in November, 1868. Dr. M. B. Manesby, president, who began practice in Dallas county in 1854.

WARREN COUNTY MEDICAL SOCIETY

Warren County Medical Society was organized in July, 1869 with seven members.

MADISON COUNTY MEDICAL SOCIETY

Madison County Medical Society was organized in 1873. Members, Drs. L. M. Turner, L. M. Fidreck, J. G. Scott, D. D. Allen, W. L. Leonard, S. B. Cherry, M. W. Crider, Jas. Sloan, H. A. Russell, John Green, W. H. Anderson, Z. Leonard and J. H. Nelson.

STORY COUNTY MEDICAL SOCIETY

The preliminary meeting for the organization of the Story County Medical Society was held at Dr. Fairchild's office in Ames, June 19, 1873. There were present, Drs. Starr and Fairchild, Ames; Dr. B. F. Allen, Story City, and Dr. J. S. Gillett, Iowa Center.

On July 17, 1873, the Story County Medical Society was formally organized by electing Dr. D. S. Fairchild, president; Dr. J. S. Gillett, vice-president, and Dr. S. J. Starr, secretary, and adopting the code of ethics of the American Medical Association. The membership consisted of Drs. S. J. Starr, James Bradley, J. S. Gillett, B. F. Allen and D. S. Fairchild. At that time there were but seven graduate physicians in the county, and three of this number were not engaged in active practice. Those holding diplomas were as follows:

Dr. Sheldon, Iowa Center; Dr. Gillett, Iowa Center; Dr. Stitzel, Nevada; Dr. Grafton, Cambridge; Dr. Bradley, Ames; Dr. Fairchild, Ames; Dr. Favre, near Ontario. Drs. Sheldon, Favre and Grafton, were not in active practice.

The meetings of the Story County Medical Society were held quarterly. At the second annual meeting (1874). Dr. G. A. Meredith of Ontario was admitted to membership. The old officers were re-elected.

For several years after the organization of the society the number of graduates in medicine were so small that all engaged in active practice who did not profess to belong to some special sect of medicine were admitted to membership.

At the time Story County Medical Society was organized, the only towns having physicians were Ames, Nevada, Story City, Iowa Center, Colo and Cambridge. Most of the physicians were practicing on one course of medical lectures. Only a few roads were fenced and were so bad that for a part of the year on horseback was the only practical way of visiting patients in the country, and

it was sometimes a good day's work to visit two patients.

Story County Medical Society for the first ten years of its existence met regularly every three months, but with a rather fluctuating membership. About 1884 or 1885 there were enough graduated physicians in the county to reorganize on the basis of a full medical course with a degree as a requisite for membership. The one course practitioners who remained had in the meantime attended a second course and obtained a degree.

IOWA MEDICAL JOURNALISM

PART EIGHTH

Three events of fundamental importance to medical progress occurred in Iowa in 1850. We have already noted the beginning and growth of the Keokuk College of Physicians and Surgeons, and the Iowa State Medical Society.

The organizing of the medical college, suggested the necessity of a medical journal as an aid to the interests of the institution. It is interesting to know that the leading men in all three activities were the same individuals: Dr. John F. Sanford of the State Medical Society, and Drs. Sanford, J. C. Hughes and McGugin of the Medical College and the Medical Journal.

The first number of the Western Medico-Chirurgical Journal was published in Keokuk, September 1, 1850. In the editorial introducing the Journal to the medical public the editor says:

"This is the first medical journal ever issued west of the Father of Waters, north of the Missouri, in that boundless region, the commerce and power of which is destined to affect the American continent and which in its rapid, almost magical transition from nature's wilderness to the cultivated fields; the flourishing villages and populous cities of civilized and enlightened men, presents a subject of reflection unsurpassed in interest in the annals of the world."

The writer in a moment of prophetic enthusiasm expressed himself in rather stilted phrases, but those were days when the eyes of men were turned to the future and Keokuk being the gate-

way of Iowa, the editor felt justified in expressing himself in terms of his own. The writer goes on to say: "With full faith that our medical brethren will respond to these sentiments and extend to our Journal, the necessary support we enter upon our duties with a pledge, that no pains or labor shall be wanting to make it worthy of their confidence." The Journal was conducted by the Faculty of the Medical Department of the Iowa University, Dr. J. C. Hughes, editor-in-chief.

The first paper in number one, volume one of this pioneer medical journal, was by John Forest Dillon, M.D., of Farmington, Iowa. (Dr. Dillon soon gave up the practice of medicine, took up law and became a famous attorney, judge and professor of constitutional law in Columbia University, New York.)

The title of the paper was "A Case of Rheumatic Carditis; Autopsical Examination." It appears that this man had been under the care of a class of practitioners—the lineal ancestors of a group that we have with us now and always will have with us. The doctors who treated the case were known as "Thompsonians, Beachitis, Emetics and Homeopaths with which our Western country is so disgracefully flooded." This man, it appears died after being treated by a Thompsonian doctor with large quantities of lobelia which was the favorite remedy with this class of practitioners in early days. Dr. Dillon performed the autopsy twelve hours after death.

Under the head of surgery, there is an article on nitrate of silver by Professor J. F. Sanford, who states; "No remedy in the materia medical

may rightfully claim a higher consideration from the surgeon than the nitrate of silver, yet we believe there are few so little appreciated by the general body of the profession."

In the October number (1850), we are informed of a visitation of cholera which came upon the people of the Mississippi Valley, especially afflicting Burlington through the wisdom of Providence, for it is stated in these words:

"It is not our purpose to write an extended article upon this terrible pestilence which in the wisdom of Providence has again visited us." In Keokuk, so it is recorded, in the months of May, June, July, and August there were forty cases of cholera with twenty-five deaths. In Burlington, it is reported that during the same time or rather a little later, on the night of the fourth of July, the number of cases attacked from that time on to October, was between 400 and 500. The number of deaths from 80 to 100. This in a population of about 5,000.

It does not appear that the remedies used had much effect, although Dr. McGugin said, "in his opinion, Calomel was the sheet anchor; not given as a specific, but as a remedy which more frequently than any other, would excite the secretion of the liver, diminish the congestion of the viscera, determine the circulation to the surface and extremities and thus cure the patient." The doctor recommended calomel in doses of from 20 to 30 grains and stated: "This was the course pursued by myself and several other physicians, and we saw no reason to change it, though of course, it was not successful in every case."

Keokuk and Burlington no longer fear a visita-

tion of cholera, thanks to medical science. Almost sixty-nine years later another visitation came to Burlington in the form of an influenza and pneumonia; there were 2,500 cases with 500 deaths. If Dr. McGugin in 1850 had predicted that in a few years, cholera would disappear, forever would it seem less strange than to prophesy today that influenza likewise will disappear through the discoveries of medical science?

In the October number, 1850, is an editorial review of the first meeting of the Iowa State Medical and Chirurgical Society (Iowa State Medical Society) in which it is stated that; "The proceedings of this Society, in the form of a neat pamphlet came to hand too late for notice in the first number of the Journal, but it gives us great pleasure now, to transcribe such items in connection with the organization of the Society as will be most interesting to our readers. Much effort has been expended by several eminent members of the profession in this state, during the past few years, in directing the minds of medical men to this important subject, but the call, issued in May last, was the first to which there has ever been a satisfactory response. We are happy to say, however, that, although the profession have been slow to move in reference to this matter, when they did assemble in convention at Burlington in June last, their action was praiseworthy and efficient. About twenty-five physicians met pursuant to this notice, and entered upon the duty of organizing a State Medical Society with commendable zeal.

"The discussions which eventuated in the fulfillment of this object, were conducted with dig-

nity and ability, and inspired all those who were present, with confidence in the success and permanence of the Society. It will be seen by the synopsis of proceedings below, that the Society adopted a constitution and by-laws, and appointed several committees whose duty it will be, during the present year, to develop as far as possible, the scientific resources of our state, and collect such medical statistics and general intelligence, as will be a necessary basis for future action.

“The duty of the several committees appointed under these resolutions, can be performed but imperfectly without the cooperation of the profession throughout the state. It is all important, as an aid to the further enlightened action of our State Society, that the state of the profession in Iowa shall be actually known to them, in order that the obstacles to reform and progress may be seen and removed. A committee of three, however, occupying one or two localities, cannot extend their investigations into every portion of the state, and regular members of the profession, wherever situated, should manifest their zeal for the promotion of science, by communicating such facts as come within their observation, to the chairman or members of the various committees. Thus a report of the number of physicians in a particular county—the proportion of regular practitioners, of graduates, the principles which have regulated their intercourse, etc., etc., would greatly aid the committee under the first resolution, whilst a little attention to the meteorological phenomena, and the type of disease usually observed in particular localities, would constitute a valuable contribution to medical science, and fa-

cilitate the labors of the committee under the second resolution.

“Under the third resolution, a committee was appointed whose agreeable duty it will be to report upon the Medical Botany of Iowa. The floral riches of this beautiful and charming state, seem almost inexhaustible, and no one doubts that, amidst this profusion of nature’s eloquent and poetic beauties, mines of medicinal wealth exist, from which the balm to many an ill, incident to our country, may be bountifully drawn. Numerous as are the blessings which spring from the bosom of our mother earth, they may be greatly multiplied by the assiduity of the medical botanist, and we sincerely trust a larger proportion of our physicians may be found devoting their attention to this subject. Our medical plants should be known and accurately classified in order that we may resort to the great storehouse of nature—the fields and the forests—where no mercenary hand mingles with their life-giving principles, the seeds of death.

“The next meeting of the Society will be at Fairfield, Jefferson county, on the first Wednesday of May, 1851.”

The Medico-Chirurgical Journal (later Iowa Medical Journal) maintained a watchful care over Iowa medical interests in their infancy and the energies of the strong men of that day were unselfishly devoted to strengthening by voice and pen the professional activities they had set their hands to.

It has been noted in the editorial above referred to that high ideals were held by our first editorial writer. Seventy years have passed since the edi-

torial was written and changes of immeasurable importance have occurred touching the dignity and character of the profession, and it is sincerely to be hoped that the Journal which represents the Iowa profession today has not fallen short in honest endeavor to maintain the same ideals.

It must be remembered that not more than one-half of the men practicing medicine in Iowa between 1850 and 1870 had received a medical degree and the number who had received a literary degree was very small indeed, and the true professional spirit was confined to comparatively few men. The profession as such did not stand very high in public esteem, it being looked upon only as a bread-winning business, but the individuals we refer to in these writings were big men and much honored in the state.

We are informed that the next (second) meeting of the state medical society will be at Fairfield, Jefferson county on the first Wednesday in May, 1851.

A vigorous editorial protest is made in relation to an unethical offer by the Evansville Medical College to admit the "Sons of Temperance" at one-half the regular fees in consideration of an agreement to recommend the school as in every way worthy of public confidence.

It appears that in 1851 some plans were being considered for contracts with families to render professional services by the year. In the March number (1851), is an editorial condemning this practice as being "unethical, mercenary and unworthy of the members of a dignified profession and savoring too much of the dealer of matches, the butcher, the ice man, etc." It does not appear

that any movement materialized to establish this method of doing medical practice.

In the April, (1851) number, after giving notice of the meeting of the State Medical at Fairfield the editor asserts that "No state in the Union is less cursed with empiricism (except in patent medicines) than this. Thompsonionism, Homeopathy, Hydropathy, Electicism, and other forms of quackery have not as yet, taken root in our soil; and if the medical profession will unite in such associations as will promote the development and dissemination of the true principles of our science, its future growth will be effectually arrested."

In the June, (1851) Journal a rather exhaustive paper appears on "Medical Topography and Diseases of Iowa" by J. F. Henry, M.D. In those days the relation of climate to disease was regarded as very close, and climatic studies were much thought of.

It was during these early years that much jealousy existed among the proprietary medical schools and found expression in many editorials in official, or in friendly journals and the Keokuk Journal did not fail in this respect.

In August, 1853, the name of the Journal was changed from the Medico-Chirurgical Journal to the Iowa Medical Journal, edited by the faculty of the Medical Department of the Iowa University. It is to be presumed that Dr. J. C. Hughes was editor-in-chief although his name does not thus appear until some years later.

The Iowa Medical Journal first appeared monthly printed at the Whig Book and Job Of-

fice, subscription price \$2.00 annually in advance. Later the Journal appeared every alternate month, edited by Dr. J. C. Hughes, printed at the Gate City book and job rooms. Notwithstanding the announcement that the Iowa Medical Journal would appear every alternate month, numbers two and three, volume five, for January, February, March and April appeared in April, 1868 and number four, January and February, volume five, appeared in February, 1869. Numbers two and three, volume five, 1868, makes the first claim of being a real medical journal, as stated in the following language:

“Notice to exchanges: The fact that our first issue was an experiment and contained but little of medical interest having been used more particularly as a college circular, we did not present it for exchange to the medical journals of the country. Its publication now being a fixed fact, we most cordially ask our own and foreign journals to exchange with us. It is the only medical journal in the state and shall always be found ready to battle for the interests of science, the profession and its institutions.” In this number (2 and 3, volume 5, 1868), there are sixty pages of reading matter, including also six pages of advertising; five drug stores, two hotels and one jewelry store, all in Keokuk. Hughes’ Medical and Surgical Infirmary and Eye and Ear Institute use one page. In number one of the same volume (5) for November and December, twenty-two pages are devoted to the Transactions of the Twenty-first Annual Session of the Iowa State Medical Society and three pages to a paper on a “New Operation Upon the Shaft of Long Bones

by which Elongation as well as Straightening May be Secured," by Professor J. C. Hughes.

We are informed that with the completion of the fourth volume the Iowa State Medical Journal suspended for several years, probably for a period of ten years.

The reason for the temporary suspension is given in the announcement for volume five in 1867:

"Gentlemen of the profession: Owing to the financial embarrassment of 1857-8 the Iowa Medical Journal, which had completed its fourth volume was suspended for want of material aid. The unsettled condition of the country since then, and my absence in Europe the last year, has prevented our embarking in the enterprise. As the country is safe, and the profession are again heartily engaged in the active duties of civil life, I propose, should I receive the necessary encouragement from my professional brethren of my own and the adjoining states, to continue what I have now commenced—the publication of the fifth volume of the Iowa Medical Journal. For the present, it will be a bi-monthly of thirty-two pages—not so large as formerly, but costing the publisher more. Its size will be increased as rapidly as the proceeds will justify; and we hope, with the aid of our professional friends, to make the Iowa Medical Journal a welcome visitor to every lover of medical science in the West. Send us your \$2.00 at once. This encourages the printer, and is the pocket argument.

"Next in importance is your contributions, which will always be acceptable, if short and to

the point, and more particularly if they contain facts and common sense.

“All letters and communications for the Journal may be addressed to J. C. Hughes, M.D., Keokuk, Iowa. Price \$2.00 per annum in advance. If not paid before the issue of the second number, the price will be \$3.00.”

The Journal makes the following announcement to advertisers: “We would call the attention of the profession and all others interested to the cards of our citizens who have so liberally aided us in this, the first number of our Journal. They are all men of business and integrity, and are prepared to accommodate the profession and public with everything in their line upon the most reasonable terms.”

The first number of volume five was for November and December, 1867; number 2, January and April, 1868; number 4, January and February, 1869. Notice appears in this last number that Dr. John F. Sanford, the founder of the Iowa State Medical Society “has abandoned his infirmary and is, we understand, about to withdraw from the profession. The Doctor has engaged in patent rights and life insurance. We know nothing of the company he represents, nor the patent lamp burner of which he is the author, but we trust that in his new sphere of action he will make it more remunerative than professional pursuits. The Doctor is well calculated to fill the new position, and we have no doubt of his financial success.”

The first number of volume 5 was issued in December, 1867, and number 4 of the same volume was issued in February, 1869. In this num-

ber, Editor Hughes writes rather despondingly, evidently the profession of Iowa was not quite ready for a local medical journal. Another factor had had its influence; the medical department of the State University had been established at Iowa City. It had been the fond hope of the Keokuk faculty that the medical department would remain permanently at Keokuk and that the Iowa Medical Journal would serve as an advertising medium for the medical school but now the Journal must exist as an independent organ with an uncertain support.

In number four the editor states that: "We regret the irregularity that has thus far characterized the issue of the fifth volume of the Journal. But while we say that sickness of the editor and a want of proper support from the profession, has caused it, we may say but the truth. We again appeal to our friends to give us the proper encouragement, and we will try again. But if the profession expect us to edit it, pay for it, and take the curses which attach to the position, they will find an editor suddenly withdraw from the assumed honors fully convinced that glory of this kind will not pay."

The editor evidently kept his word for the Journal suddenly disappeared. Whether volume five was completed we do not know, for number four was the last number we have been able to discover. Editing a medical journal is not one of the most encouraging employment a man can engage in, and yet there is something attractive in it, that cannot be measured by dollars and cents. There is something in keeping in touch with a profession that the world cannot do without. It

is probably true that well people say things, and do things about doctors, that are not always complimentary, or pleasant, but the time comes when almost every man and woman anxiously turns to the doctor as the best and most desirable of all human beings. Trade, commerce and all the world, depends upon medical science for health, safety and happiness in all their activities. It may be now, that the pills and powders of our first editor, are about to give place to health and welfare activities and organization which will render the personal attention of the Doctor in great measure unnecessary.

It must be remembered that when Dr. J. C. Hughes wrote the discouraging editorials, Iowa was thinly settled, transportation slow and uncertain, and not far from one-half of the medical profession had never even had the advantages of a two-term course of sixteen weeks medical college training and only a common school education as a preparation; mental culture was not then a weakness among the doctors as it is now, although we have seen a six months' supply of the state and national journals without the wrappers disturbed unless by cobwebs.

In 1895 the Iowa Medical Journal again appeared with Dr. J. W. Kime of Fort Dodge as editor. The first number bears the date April, 1895. The editor states: "The plan of this Journal is somewhat unique in medical journalism. It will be edited in a number of independent departments, each having its own special editor and collaborators and will be expressly for the profession of Iowa, its columns being open only to the physicians of this state though collaboration

will be made from every available source. The Journal will be edited in ten departments, practically covering the field of medicine and surgery."

The first volume contained 710 pages and presented a very creditable appearance showing that the editor was well fitted for the undertaking. Dr. Kime in July, 1900 on account of other interests transferred the Journal to Dr. E. E. Dorr of Des Moines. The following announcement appears in the July number :

"The Iowa Medical Journal has changed hands. The new management has an ambition to make this publication a credit to the profession and useful to every patron. It hopes to make it the duty and the pleasure of every physician in the state to patronize it and take pride in its success. It will study the interests of legitimate practice and defend the right of the craft. It will strive to be useful in all ways to those who maintain it, keeping in mind always the public good as well as the interests of its class. It believes in the highest professional attainments and in most loyal citizenship, in professional duty and in patriotic effort. To these ends we will be glad to hear from those we aspire to represent, and will put the enclosures where they will do the most good.

"The Iowa Medical Journal is established. It has stood the test for six years, and is representative of Iowa progress. We propose to make it essentially an Iowa Journal for Iowa physicians, practical in every branch. The general practitioner whom we hope to make our friends are all busy men and find time only to read the medical journals between calls, so we take it that short, practical articles will be appreciated.

"This journal is non-partisan and non-scholastic, standing simply and alone for the broad interests of our beloved profession.

"Dr. Walter L. Bierring of Iowa City, professor of pathology in the university, will correspond from the pathological department. His prominence in the profession and in the State Medical Society makes it unnecessary for us to introduce him.

"Dr. W. W. Pearson of Des Moines will have charge of the eye, ear, nose and throat department of the Journal, and the readers are assured of an up-to-date department.

"Dr. E. L. Stevens will have charge of the department of medicine and those of you who have ever come in contact with the doctor will recognize in him a man who will furnish only the best and keep his department up-to-date.

"This will constitute the advisory staff of the Iowa Medical Journal at present. We ask your co-operation in this work so that the physicians, our neighbors, brothers, all of us, may be mutually benefited."

The Journal remained an entirely independent organ until 1906 when the Iowa State Medical Society contracted with Dr. Dorr to publish its transactions for a period of five years assuming nominal control through a committee on publication.

At the close of the five year period the House of Delegates of the State Medical Society organized a Journal of its own in accordance with a plan generally adopted by State Medical Societies under the name of the Journal of the Iowa State Medical Society with Dr. Fairchild as

editor. The Iowa Medical Journal continued as a private medical journal edited by Dr. E. E. Dorr until June, 1914, when it was purchased by the Iowa State Medical Society and merged with the Journal of the State Society.

The Iowa State Medical Reporter was organized in 1883 with Dr. F. E. Cruttenden of Des Moines as editor and publisher.

In the first or July number, 1883, the editor makes the following appeal to the medical profession of Iowa: "With this number our medical staff feel that they are stepping forward with open hands, to every regular practitioner in the State of Iowa, inviting a cordial co-operation and asking for a personal interest in the object, in the welfare, and in the columns of the Iowa State Medical Reporter. Has the time come that we need it? Will it receive nourishment and live? These questions, touching the vitality of all new projects, have cast their shadows on us."

In the June number, 1884, the editor announces the end of the first volume in an editorial not particularly encouraging. The financial returns did not warrant an increase in size, but hopes for something better in the future, and states: "During the coming years, the Reporter will be under the following management: editor and publisher, F. E. Cruttenden of Des Moines; associate editorial staff, C. M. Hobby, Iowa City; L. C. Swift, Des Moines; D. S. Fairchild, Ames; W. L. Allen, Davenport, and H. B. Young, Burlington."

The first number bears the date July 1, 1883. The journal was published monthly and the twelve numbers contained 182 double column pages. The Reporter continued for a period of three years

when it was discontinued on account of the demands of the private business of the editor, Dr. F. E. Cruttenden.

The Interstate Medical News, an independent medical journal of medicine, surgery and allied sciences. J. H. Talboy, M.D., editor; Charles M. Wade, M.D., associate editor, and publisher. A journal bearing the above title appeared in Sioux City, published quarterly. The first number appeared February 15, 1895 and contained thirty-eight pages. The announcement was a modest one, not even explaining its purposes or hopes. Two numbers appeared and then suspended publication, we assume for the want of financial support.

In 1900 Dr. Woods Hutchinson of Des Moines entered the field of Iowa medical journalism by editing and publishing an attractive journal bearing the title of *Vis Medicatrix Nature*. Notwithstanding the skill of a brilliant editor the journal survived only nine months.

About this time another medical journal appeared in Des Moines edited by Dr. Overton. It did not appear regularly, or apparently have any definite purpose. It soon disappeared.

We have endeavored to trace in a brief outline, the history of medical journalism in Iowa. The difficulties were great and the financial returns small.

The Iowa Medical Journal first edited and published by Dr. J. W. Kime of Fort Dodge, was the first to take on the form and character of a real medical journal.

A reference to the first volumes of this Journal will reveal evidence of careful editing, admirable

form and execution, but it proved then, and has proved since that local private medical journalistic undertakings involves a vast amount of work with small returns, if not actual loss. It is doubtful if the profession, realize how much work is involved in publishing a medical journal. The difficulty is not so great when the circulation is guaranteed as in the case of the state society journals. Even with the state journals, the rapidly increasing medical activities, the more complex economic relations of the profession and the complicated interests places the editor often in an unenviable position.

PHYSICIANS WHO LOCATED IN IOWA
IN THE PERIOD BETWEEN 1850
AND 1860

PART NINTH

DR. WM. S. ROBERTSON

Dr. Wm. S. Robertson of Muscatine was for many years one of the most interesting figures in Iowa medicine. He came to Iowa when the state was young and developed a vigorous manhood which together with a sense of honor gave him an influence and leadership which continued through a long and useful life. Dr. Robertson was full of physical, moral, and intellectual courage, sound judgment and skill in directing the means of treatment as known in his day.

His work was replete with opinions of European medical men and as a student of letters he was a diversified reader as he read Latin and Greek as well as he did English. The only literature now open to him in medicine was from the German but this he got through the Lancet which was and is one of the greatest medical reservoirs.

Dr. Robertson possessed a cheerful and optimistic spirit which fitted him for the trials and difficulties confronting the pioneer. He possessed an unusual personal magnetism and with a fine physical organization he became easily a leader and a worthy successor of his distinguished father, Dr. J. M. Robertson.

Dr. Robertson's sense of public duty led him very early in life to advocate a public health service in Iowa and probably to him more than any other was due the legislative enactments creating

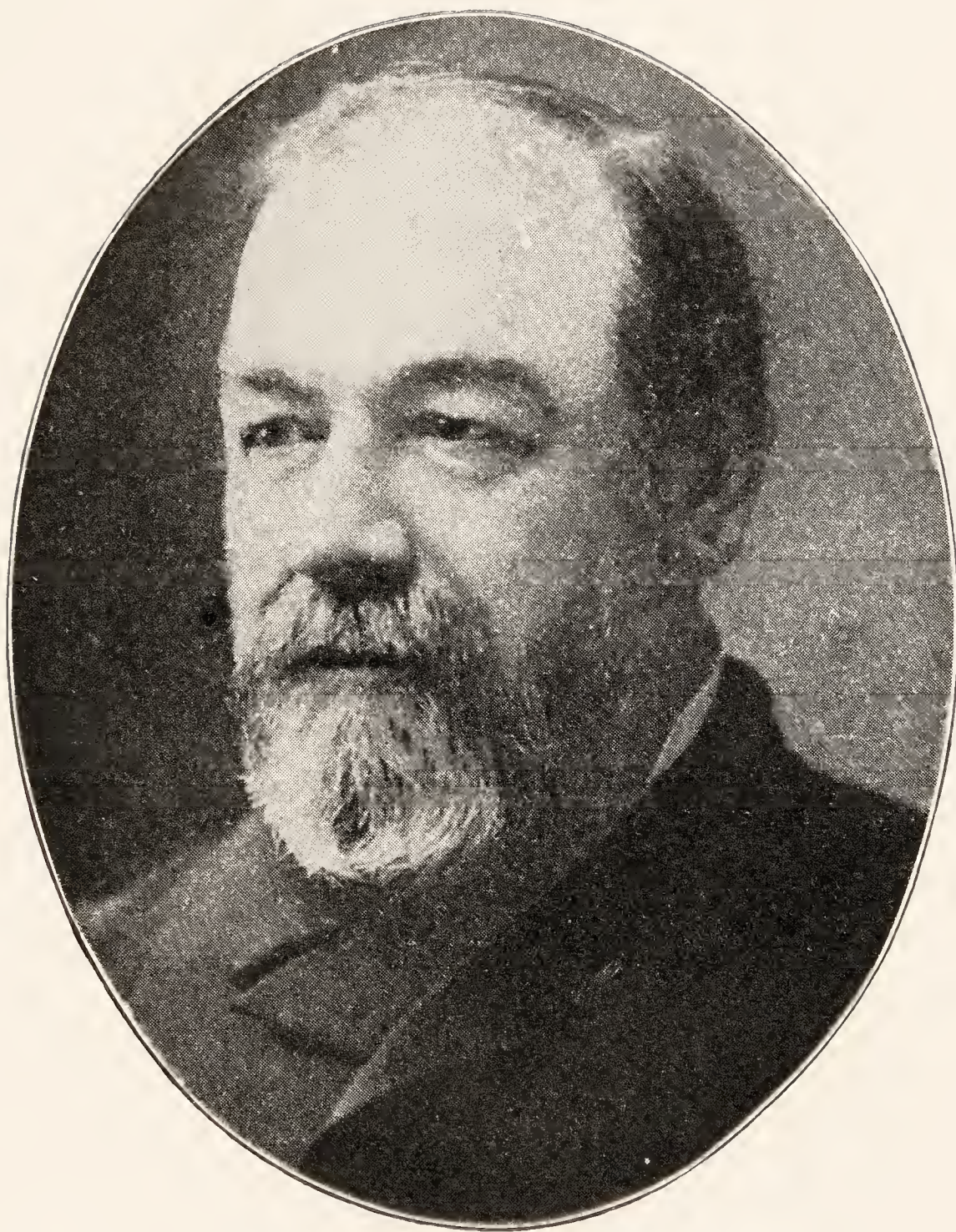
the Iowa State Board of Health of which he was the first president.

When Dr. Robertson first came forward with a plan for a Public Health Service but little thought had been given to the subject, and he was met everywhere with an indifference which cannot at the present day be fully appreciated, but his courage, his earnestness and devotion at last prevailed, and a beginning was made in a line of service which will stand foremost in the medical activities of future years. In this struggle, the experience Dr. Robertson had gained as a state senator, and the influence he had acquired in public life, was of great advantage.

Dr. W. S. Robertson was born June 5, 1831 in Georgetown, Pennsylvania. When a boy his father, Dr. J. M. Robertson, moved to Burlington, then the most important city of the southwestern section of Iowa. His preliminary education was obtained in the public schools of that day, later he matriculated in Knox College, Illinois, but before completing his course his health became impaired and he was obliged to abandon his college course. In 1852, Dr. Robertson entered his father's office as a medical student. In 1854, he attended his first course of lectures at Jefferson Medical College, Philadelphia, from which he graduated March 8, 1856.

In the meantime, and even before he began the study of medicine, his father moved from Burlington to Columbus City. Immediately after receiving his diploma Dr. Robertson entered upon the practice of medicine with his father, which continued until the breaking out of the Civil War.

It is to be said of Dr. W. S. Robertson that his



DR. WM. S. ROBERTSON

interests and activities extended beyond the routine of the practice of medicine, as was true of many of our earlier practitioners. He was more than a practicing physician and surgeon; he was active in all that related to civil life, he was the type of the man of his generation who was able to meet every condition with understanding, firmness, and courage. During the early days of practice, the conditions in a new country demanded a readiness to meet dangers and exposure unknown to men of this day. Beside the risk of medical practice, the country was infested with outlaws, particularly horse thieves. In certain sections along the Mississippi, they were extremely active. The personal exploits related of Dr. Robertson in hunting these pests of civilization and bringing them to justice, read like the frontier stories that filled our youthful imagination.

In 1858-9, Dr. Robertson joined a military company and devoted considerable time to the study of military science, which prepared him for great usefulness in the days near at hand. With the breaking out of the Civil War, there was pressing need of men of courage, resolution and knowledge to lead our soldiers. Dr. Robertson's training and character fitted him for this service, and on July 13, 1861, he was mustered in as major in the Fifth Iowa Infantry. This regiment did guard duty until called into active service at the battle of New Madrid, March 4, 1862. Major Robertson was honorably mentioned by his commanding officer on this occasion in his official report.

After two years active service, Major Robertson resigned (July 23, 1863) and resumed prac-

tice at Columbus City. In 1869 after a winter of graduate study in New York, he moved to Muscatine.

When the medical department of the Iowa State State University was organized at Iowa City, Dr. Robertson was elected chief of the department of the theory and practice of medicine, which position he held to the time of his death, January 20, 1887.

For many years he was a leading member of the Iowa State Medical Society, of which he became a member in 1861, and was elected president in 1873. During his many years of service as a member of the State Medical Society and as a professor in the state university, the doctor gained a body of friends who mourned his loss in a most affectionate manner. The writer recalls the session of the state medical society at Sioux City the year next following his death when a special meeting was called to participate in a memorial tribute of affection and regard.

In 1873 while acting as county physician, Dr. Robertson gave his attention to the sad condition of the feeble-minded children being cared for in the County Poor Farm. Upon visiting other counties he found similar conditions existed. This caused him to bring the matter before the Iowa State Medical Society. He was appointed chairman of a committee to present this subject to the state legislature with the effect that he drafted a bill "Plea for the Feeble-minded Children of the State of Iowa." This resulted in the state institution which now is housing 1000 patients at Glenwood.

Dr. W. S. Robertson died at Muscatine, Iowa, January 20, 1887.

DR. SUMNER B. CHASE

Dr. S. B. Chase was born in Limington, York county, Maine. October 4, 1821 and died in Osage, Iowa, June 19, 1891.

Dr. Chase was one of the number of strong earnest men who laid the foundation of a medical practice in Iowa in the decade between 1850 and 1860; at a time when men of character and physical energy were needed.

Dr. Chase was born of sturdy New England stock; of a generation of farmers. When five years of age, he made his home in Scarborough, availing himself of such opportunities for an education as came in his way. The young man having decided on medicine as his life work, entered the office of Dr. Seth Larrabee, a well known practitioner, as a student and in May, 1849, graduated from the medical department of Bowdoin College. He first located in practice at Portland, Maine. Six years later, or in September, 1855, Dr. Chase came to Iowa and located in Decorah, but a year later moved to Osage where he practiced thirty-five years or until his death in 1891.

The field of usefulness for a trained physician in a thinly settled community as was Osage at that time, and among people who knew but little of sickness, extended beyond the administration of medicine, to public service activities, and in 1856, Dr. Chase was appointed postmaster. In August of the same year, he resigned to accept the office of register of deeds, of the United States Land Office, then located in Osage.

Dr. Chase was a democrat in politics and in 1884 was elected a delegate to the National Democratic Convention which nominated Grover

Cleveland for president. Politics, however, was secondary and incidental in his career, and was regarded as a duty. His interest in the profession of medicine was shown when in 1854, he was a delegate from Maine to the American Medical Association at St. Louis.

In 1873, Dr. Chase became a member of the Iowa State Medical Society and in 1881 was elected its president.

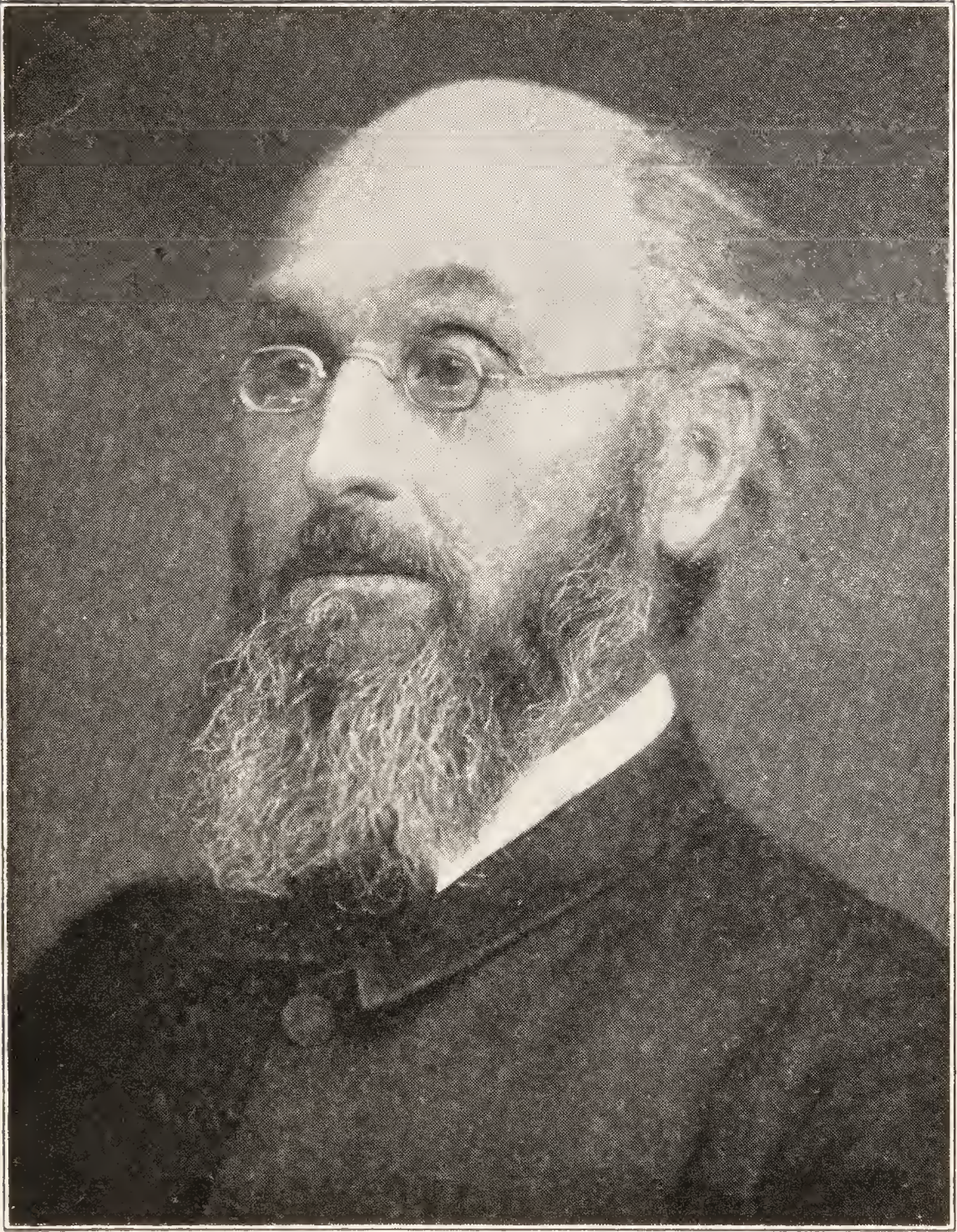
Dr. Chase was a kindly man and an ideal family physician. His high character and sympathetic nature brought him a large following of friends and patients. He was a deeply religious man, a free-will Baptist from choice—but a Congregationalist from affiliation. He married Miss Almira B. Cobb of Limington, Maine. Three sons and two daughters were born to them. One son became a well known physician and a professor in the medical department of the Iowa State University.

We are permitted to utilize in this connection a short biographical sketch of his son, Charles Sumner Chase, which appeared in the Iowa Alumnus for October, 1920.

DR. C. S. CHASE

Dr. C. S. Chase, who retires from the headship of the department of materia medica and pharmacology, began his connection with the University of Iowa in 1892, succeeding Dr. P. J. Farnsworth. Up to now these two men have been the only occupants of this chair since the establishment of the College of Medicine in 1870.

Although Maine is Dr. Chase's native state, he has spent most of his life in Iowa. He received



DR. SUMNER B. CHASE

the B.S. degree in engineering from Ames Agricultural College in 1874 and was a student in the department of medicine at the University in 1880-81, previous to his graduation from Rush Medical College in 1882. In 1895 the University of Iowa granted him an honorary degree of master of arts.

For nearly twenty-five years Dr. Chase practiced medicine in Waterloo; fifteen years of this period was coincident with part-time work at the university in non-residence. Later he moved with his family to Iowa City.

Dr. Chase continues his instruction in the colleges of dentistry, and pharmacy, and the nurses' training school: but expects to find time to complete a history of the College of Medicine of the University of Iowa covering its first fifty years. He plans to retire from all the colleges with which he has been associated since 1892—June of 1922, thereby completing three full decades of service. He has not at the date of this article definitely decided as to his plans for the future, but may possibly re-engage in general practice for a few years in the City of Waterloo, where he spent so many years of his life most happily.

DR. ARCHELAUS FIELD

The early life of Dr. Archelaus Field was characterized by extreme privations and strenuous exertion. Grubbing hazel brush for a garden spot with a hatchet, trapping musk rats and ground hogs for their pelts; the former sold as fur, the latter tanned in wood ashes and water and soft soap, cut and braided into whip lashes and sold for revenue; planting and hoeing corn from seven a. m. to sundown for 25 cents a day;

milking two cows all summer for their two calves which he trained to be oxen, walking three miles a day and return to school; teacher's certificate to teach English branches and pedagogy at fifteen; reading medicine and toting medical saddle bags with some degree of success and popularity at twenty, are some of the outstanding incidents in a life that providentially has been extended well past its ninety-second birthday.

He was born November 15, 1829, his father being Dr. Abel Wakely Field, a native of Bennington, Vermont; and his mother Zilpha Witter Field, a native of Ontario county, New York. He was the eldest of three brothers, all of whom reached manhood. His brother Orestes G. having been a distinguished surgeon of the War of the Rebellion, and the youngest, Captain James W., still living, a retired capitalist of Marysville, Ohio.

In 1839 his parents removed from Ontario county, New York, to Madison county, Ohio. His first occupation was that of planting and hoeing corn for a neighbor farmer for 25 cents a day from early morning to sundown. There were no walking delegates in those times. His first commercial transaction was with his father, whereby he agreed to milk two cows all summer and winter for their two calves. These calves were his first team. He made his own sled and ox-yoke, and has a scar on one of his shins where he was hit by a drawing knife in smoothing the tongue of his sled. He also bears another scar in one of his eye-brows where he was hit by a refractory hickory stick which he was bending for an ox-bow.

His first real nice suit of clothes was made up by his mother. He paid 18 cents a yard for cloth for the coat, 37 cents a yard for cloth for pants, both blue check, 7 cents for calico to make a vest, and 60 cents for silk for a cap.

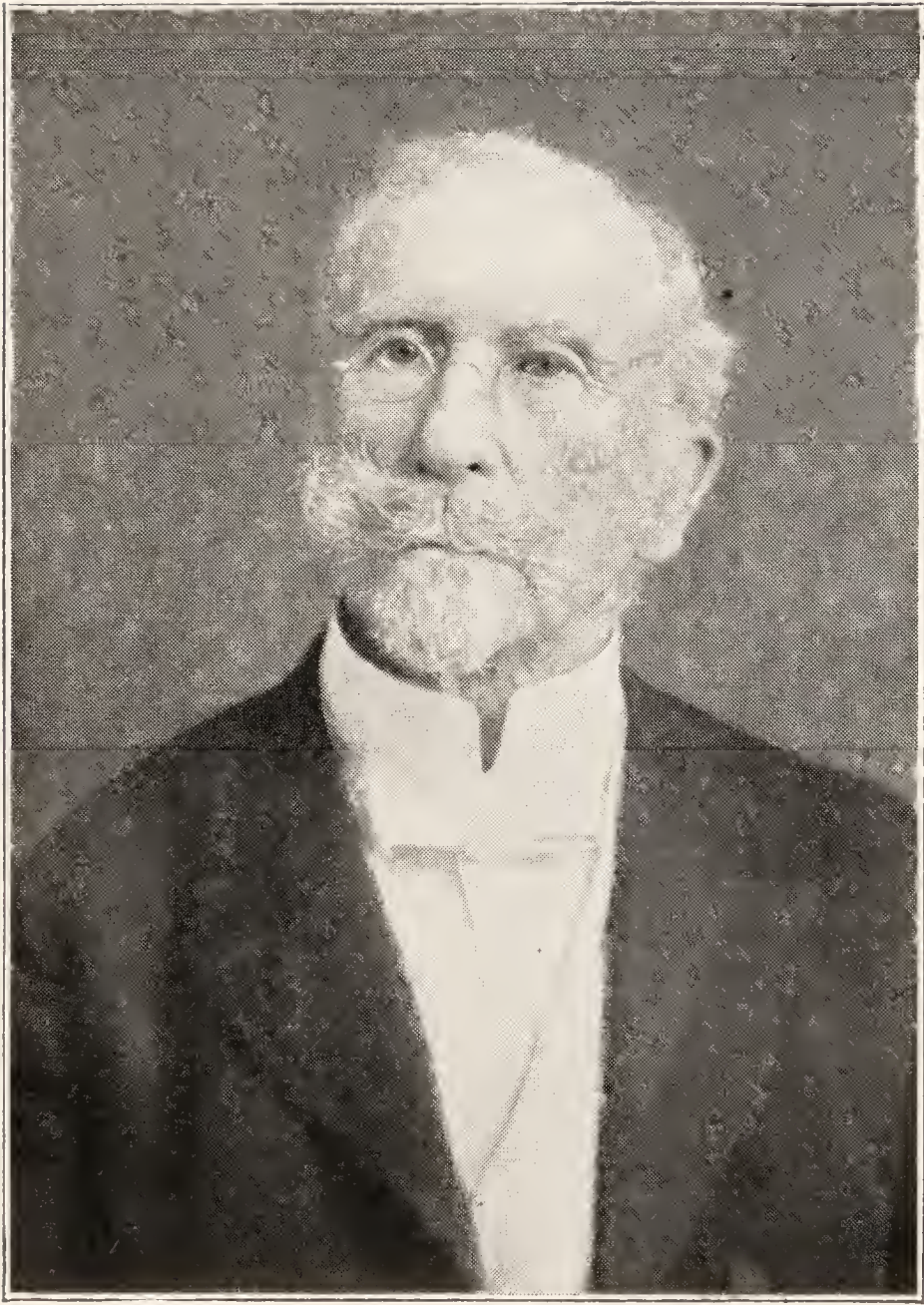
Between the ages of twelve and twenty years he attended academies at West Jefferson, London and Worthington, always hiring a room and boarding himself, teaching and working on a farm at intervals. At fourteen he raked and bound wheat and oats, keeping up with the cradle through harvest—a man's work. His employer, Judge Burnham of West Jefferson, Ohio, made him a present of five dollars at the close of the season, this being the first substantial present he ever received. At the age of fifteen he secured a certificate for teaching the English branches, which certificate he still has, dated April 7, 1845. He also has his last certificate for teaching, dated Chillicothe, Ohio, October 31, 1849. In addition to common branches this latter certificate included algebra, natural philosophy, chemistry and astronomy. All of his traveling was done on foot, and four days and three nights were consumed on the road between Frankfort and Chillicothe, with intensive study of the branches upon which he was to be examined. The examiner's name was Wm. B. Franklin, and the examination was brief and satisfactory, he receiving a certificate for two years. His school was to begin in two weeks, and he returned home to Madison county for a short visit, after which he started for school with his belongings in a small wooden trunk two feet long and one foot square. He does not remember any test of physical strength and endurance equal

to that of transporting this trunk, which he still has. Its position was changed hundreds of times from beneath one arm to the other, and from the top of one shoulder to the other, during this journey over muddy roads and part of the time in the rain. He also has the trunk which contained his entire possessions when he came to Iowa in 1849.

In June, 1850, he joined a company of emigrants from Madison county, Ohio, to Appanoose county, Iowa. There were eleven wagons and about thirty people. The new experiences were much enjoyed by all, although an unlucky grasshopper occasionally got into the biscuit and marauding spiders into the blankets. But the mode of traveling finally became quite monotonous, especially over the miles and miles of corduroy bridges through the black swamp of Indiana. A flat ferryboat at Burlington made several trips to land the party on Iowa soil. New inspiration came to all in the invigorating atmosphere of Iowa, having been on the road six weeks.

Most of the party settled in and about Centerville, where the subject of this sketch nailed up his shingle for practice. People were healthy, and as there were plenty of older doctors, he had but few calls. In the early spring of 1851 he was appointed deputy sheriff of Appanoose county, and in that capacity assisted in taking the census of a large part of Appanoose county.

A little later the county seat of Wayne county was to be located, and George W. Perkins, surveyor of Appanoose county, was appointed as one of the locating commissioners. Before starting Mr. Perkins invited the subject of this sketch to accompany the party, and, without asking why he



A. G. FIELD M.D., L.L.B.

did so, he at once joined the expedition. There were very few families in Wayne county at that time—probably not over six or eight, and none nearer than four and one-half miles from the center of the county. The best part of a week was spent in riding over the wild prairies, occasionally molesting a herd of deer or a flock of wild turkeys or prairie chickens. Finally, when selection of a location had been made, Mr. Perkins wrote on a piece of paper the numbers of the land for the future county seat, now Corydon, also the numbers of two eighties, one east and the other south of the proposed town site. He said the commissioners would start immediately for Fairfield to enter the selected town site, and suggested that Dr. Field go too, but by another route, and try to secure the two eighties of which he had given him the numbers. This he did, although he had less than a dollar in excess of the amount required to pay his necessary expenses. Bernhard Henn was then commissioner of the land office. Dr. Field did not wait for the commissioners; a good horse solved the problem. He reached the land office more than a day in advance of the commissioners and made a confidante of Mr. Henn, to whom he had no word of introduction. Mr. Henn accepted the statement of the dust-covered stranger and at once placed a land warrant on the proposed town site, lest the commissioners might be intercepted by some speculator. He then placed another land warrant upon the two eighties for Dr. Field, accepting his note for two hundred dollars and giving him a bond for a deed in one year, dated May 11, 1851. The commis-

sioners arrived the day following to find the town site secured.

Returning to Centerville, Dr. Field was offered a partnership with Dr. Nathan Udell of Unionville, afterward state senator. This engagement was soon terminated by the accidental death of his father, Dr. Abel W. Field, on the twenty-first day of August, 1851. He returned to Ohio and at once took up the practice left by his father. The following spring he returned to Iowa to pay for his land and to look it over. The trip was made by deck passage on a steamboat via Cincinnati, Cairo and Keokuk, furnishing his own provisions. He took the railroad from Columbus to Cincinnati, and from and to Keokuk he went on foot by way of Mt. Pleasant, Bloomfield and Centerville.

In the autumn of 1853 he entered the office of Prof. John Dawson of Columbus, Ohio, matriculated and paid for tuition for the session of Starling Medical College in 1853-4, and graduated the following spring, three years' practice being accepted in lieu of one course of lectures. To provide means to start again he had engaged a school in Brown township, Franklin county, and as soon as examinations were over went again into the schoolhouse for one term. In the spring of 1854 he located in Hillsboro, Highland county, Ohio. He secured a fair practice, but collections were slow and insufficient to meet his necessary expenses. He sold his buggy and a few months later his beautiful black horse to meet expenses. The parting with Cola was, Dr. Field says, the severest trial of the kind of his life.

In June, 1856, he formed a partnership with Dr. Buchanan in Faircastle, Brown county. Dr.

Buchanan, like many other drunken doctors, had a reputation far above his merits. Dr. Field had nothing but energy, health and fair qualifications, while Dr. Buchanan had reputation, horses and business. Dr. Field worked his business for all these was in it until the autumn of 1856, when he paid what debts he could, reserveing twenty-four dollars, called a meeting of creditors at Mr. Hibben's store, and told them he thought it best for all concerned that he try another location. They all gave their consent. No one asked where he was going and he did not know himself.

He then went to Cincinnati and called upon Prof. Wm. Dawson, brother of his preceptor. Dr. Dawson advised him to go south. Leaving his books, diploma and everything else at Hillsboro (which no one had asked him to do), he took the first train to Louisville. Leaving his satchel at a hotel, he walked toward the river, where he saw a sign on a steamboat which read: "Tennessee River This Evening." He returned to the hotel, got his satchel, which contained an overcoat, one shirt and a change of under-clothing, and went on board the boat. The captain said they would go to Eastport, Mississippi, and farther if the stage of water would permit. Dr. Field paid his fare, ten dollars, and had less than ten dollars left. Night came on, and every "thud, thud" of the old steamboat widened the distance between him and every one he had ever known. That was a pretty dark night! About the fourth day Eastport landing was reached. The town was about two miles from the landing, and there were plenty of conveyances; but Dr. Field took his little carpet sack and footed it. Cypress trees with big knees, bales

of cotton, mules and ox teams, old tumbledown wagons, scantily-clad negroes, sand roads with no sidewalks, were among the first sights. Every man was clad in seedy homespun, and carried a gun. Dr. Field learned that Jacinto was about thirty miles distant, that it was the county seat, and that a stage would leave at seven p. m. He paid his fare, four and one-half dollars, and while waiting chanced to step into a drug store. The druggist, Dr. Klice, was very busy filling vials with a dirty-looking mixture labeled "Essence of Tar—A Cure for All Summer Complaints." Dr. Field opened a vial, and after casual examination the druggist asked if he could tell what it was made of. Dr. Field replied that creosote was the active principle, with solution of extract of licorice and aromatic oil. He said, "You are a doctor." Dr. Field replied, "Yes, I am a sort of doctor." Nothing more was said, but in about half an hour he introduced a man whom he said had had sore eyes for a number of years, and asked Dr. Field to prescribe for him. Dr. Field asked permission to go behind his counter, compounded a prescription and gave him a treatment. The patient, one Rutledge, asked for the bill. Dr. Field held his breath while he said, "five dollars," having never charged over 50 cents in his life for a prescription. Rutledge paid it with an air that indicated that it might have been twenty.

Dr. Field now had about eight dollars. The stage station at Jacinto was reached the next morning. Dr. Field told the landlord, Robert Davenport, that he was a doctor and had come to live there, but he did not have a medical book, a dose of medicine, or anything else to identify

himself with the profession. Everything, even spare clothing, had been left at Hillsboro. The same afternoon the landlord asked him to prescribe for his mother, who had some affliction of the throat. Next day a summons came from a doctor to visit one of his patients with him. The woman had retained placenta after delivery. Dr. Field called for a pan of warm water, and in five minutes removed the source of trouble. He had another call the same evening, two or three the next day, and from that time on had plenty of business.

The horses were of poor quality, but every one was willing to loan a horse to the young doctor. After about three weeks he saw a man riding a fine large horse across the public square. One of his patients was a dry-goods merchant by the name of Jim Dobbins. He said to him: "Dobbins, I saw a horse today that I would like to have." Describing it to Dobbins, the latter said: "That is Gillenwater's horse." Nothing more was said until the next day, when Dobbins came to the hotel and said: "Doc, I have got that horse for you." Dr. Field replied, "I am sorry, for I have nothing to pay except a silver watch and six dollars in money." Dobbins answered: "All right. I will take your watch on the deal, and you keep your money." Dr. Field took the horse, and in six weeks paid Dobbins the last of \$150 for him.

Business increased beyond expectations, and Dr. Field saw no patient who died, either his own or in consultation, until after he had done over \$1300 worth of business. He was careful to attend strictly to his own business without reference to local social or political conditions. Northern

teachers and preachers going south had usually shown aversion to local affairs, especially to slavery. But Dr. Field cut out everything of the sort and, without taking any position on such matters, even when artfully suggested by negroes, soon had the unstinted friendship of every one. In about three years he had a nice plantation of 240 acres containing an extensive peach orchard, another of eighty acres, town property in Booneville, ten miles distant from Jacinto (where he kept an extra horse for exchange), had paid off his old debts in Ohio, sent money regularly to his mother, and says he never knew what disinterested friendship was until he went south.

But the war cloud was rising in the horizon, and Dr. Field thought it best to return north. In March, 1859, he returned to Corydon, Iowa, visiting his mother in Ohio on the way. Property accumulated in Mississippi was about three-fourths sacrificed in exchange for wild land in Crawford county, Iowa. He soon had a good practice at Corydon. In 1860 he was elected president of the Wayne County Agricultural Society, and so incidentally became a member of the Iowa State Board of Agriculture, a meeting of which he attended at Des Moines during the winter of 1861, stopping at the Grout House in East Des Moines, kept by T. E. Brown and his father-in-law, Mr. Marsh. The topography of the city, with bottom grounds at confluence of the rivers, surrounded in every direction by the well-shaded hills for residences, was to his mind very beautifully adapted to the requirements for a city, and before leaving he had decided to make it his future home. Thither he removed in July, 1863, but soon left

for New York for its professional and educational advantages. At that time the elder Austin Flint, James R. Wood, Frank Hamilton, were in the Bellevue faculty, Valentine Mott, Sr., in the University of New York, and Alonzo Clark, Thomas H. Marcoe and Willard Parked in the College of Physicians and Surgeons, medical department of Columbia University. To hear these celebrities Dr. Field matriculated at all three of the above-named medical colleges, his diploma exempting him from paying fees for tuition. From the last-named institution he again graduated in the spring of 1864. The class of 250 consisted largely of graduates of other institutions, M.D., A.B. or A.M. Dr. Field's name was presented at a class meeting as candidate for valedictorian. His opponent was Jas. H. McClain, afterward elected to the chair of practice and president of the faculty. He was defeated by a majority of seven votes, and this defeat Dr. Field always regarded as one of the most flattering as well as most fortunate incidents of his life, because had he been elected he could not have met the expectations of the class.

While in New York he was also a student in Bronson School of Elocution in Cooper Institute.

Returning to Des Moines in May, 1864, Dr. Field secured office rooms in the Savery Hotel, now the Kirkwood, just opposite the hotel office, where it took him seven months to discover that the rank and file of citizenship in a city, such as a doctor must depend upon for patronage, is not reached by an office in a big hotel. He then had an office built on leased ground on Third street

near Court avenue, and soon had a satisfactory patronage.

W. H. Lease, a gentleman and a scholar, was then mayor. The medical men were Drs. C. H. Rawson, H. L. Whitman, W. P. Davis, Isaac Windle, W. H. Molesworth, W. H. Dickinson, W. H. Ward, A. M. Overman, J. O. Skinner, Geo. and Frank Grimm, David Beach, D. V. Cole, T. K. Brooks, H. H. Saylor, S. A. Russell, etc. Drs. Hanawalt, Wiley, Cox, Grimes, Carter, Steel and others came later. Dr. Field sold his office to the Western Stage Company. Third street was noisy all night by the arrival and departure of 100 stages, more or less, from all points of the compass. The building still stands and is one of the second-hand junk shops on Third street. After some years the ground was needed for larger buildings and the office was moved to Mulberry street, west of Thirteenth street, and sold for a residence.

The population of the city was about 7,500. The first one-horse express wagon was brought by a man named Davis, who distributed hand-bills announcing the fact. About a year later a number went out east where the Redhead residence now is to meet and welcome the first railroad, now the Keokuk division of the Rock Island.

Rev. Thompson Bird, a typical Presbyterian minister, had organized the Presbyterian church. Will Lehman worked the organ and Major Geo. North led the choir, in which were Louisa Bird, now Mrs. Hyde, Pauline Given, now Mrs. Al. Swalm, and a number of others whose names are forgotten. The major often had some difficulty to preserve good order. The frame church build-

ing stood north of the first alley south of the Savery House, now the Kirkwood, and a nice distance back from the street. Mr. Bird said it had been built mostly by his own church members. While not pretentious, it was good and ample for the time. It was destroyed by fire. Mr. and Mrs. A. Newton, Mr. and Mrs. West, Mr. and Mrs. C. P. Luse, Mr. and Mrs. Tac Hussey, were among the members. Dr. Field had brought a letter from Dr. Steel's church in Hillsboro, Ohio, and became a member. The congregation soon after became desirous for a change of ministers, some claiming that Dr. Bird's delivery was not good. With deep regret and sorrow Mr. Bird finally resigned and Dr. Field took a letter to the Congregational church. Mr. Bird's church had all sorts of trouble to find a minister to their liking. There were a number of meetings to consider different candidates. At one of these some one proposed a name with the remark that no one here knew anything about him. Dr. T. K. Brooks at once said, "That is the man for us. We want a man that no one has ever seen or heard of."

In 1865 Dr. Field was elected city physician, and in 1866 physician for Polk county, and as such had incidentally something to do in locating and establishing the present county farm and county infirmary. In 1866 he was also appointed U. S. examining surgeon for pensioners, in which office he continued, either singly or as secretary of the board of examining surgeons, for eight years. Upon resignation he was appointed upon the board of review in the pension department in Washington, and removed to that

city in 1882. He resigned as a member of the review board to continue his work in the Keokuk Medical College, having been elected to the chair of physiology and pathology, where he had given one course of lectures the year previous, by government rules not being allowed to hold two lucrative positions at the same time. His rating in the department at Washington was so high that he thought he would be restored any time he should apply. In this he was disappointed. In 1885 some dissatisfaction between the faculty and management of the Keokuk Medical College resulted in withdrawal and establishment of another college. There was, of course, considerable feeling manifested on both sides, and Dr. Field withdrew entirely from both. He was elected secretary of the Iowa State Medical Society in 1869, 1870 and 1871, and in 1872 was elected president. In 1876 he was elected by the Iowa State Medical Society delegate to and attended the International Medical Congress in Philadelphia. He was twice elected by popular vote mayor of the town of North Des Moines, and during both terms the affairs of the town were conducted without a law-suit or a dollar bonded indebtedness. In 1868 he was elected coroner of Polk county, and in 1878 treasurer of the Forest Home School District, which position he resigned while in Washington.

In 1864, the Savery, now the Kirkwood, was a large hotel for the City of Des Moines. All its appointments were of the best and its social circles were of high order. The "wee small hours" of the night were frequently encroached upon by protracted social enjoyment, and "battle cry of

freedom," in which all joined at intervals, re-echoed through the spacious halls. These gaieties were sometimes rather too florid to meet the approval of the staid dignity of Ex-Governor R. P. Lowe, then supreme judge, who on one occasion, retired early to his room and locked the door. Mrs. J. C. Savery, being the most wieldy of the crowd, was pushed in through the transom over the door and the judge was compelled to emerge and resume his place in the circle. Major Cavanaugh, E. E. Ainsworth, George Gardner and a score of other good fellows were then denizens of the Savery.

Dr. Field has been an active member of various medical and scientific societies, including the American Medical Association, American Society of Microscopists, American Association for the Advancement of Science, etc. Charter member Iowa Academy of Sciences. He is also a member of the Iowa State Bar Association, having taken a course in the law department of Simpson Centenary College and received the degree of L.L.B. in 1879, at which time he was also admitted to the supreme court, but never engaged in the practice of law.

In 1869 he invented an instrument for impinging the spray of medicinal substances directly upon the mucous surfaces of canals and cavities, illustrated and described in the May Number, 1869, of the Medical and Surgical Reporter, Philadelphia. Some other publications are as follows:

"Report on Spotted Fever," Transactions of American Medical Association, 1865; "Hernia in Children," New York Medical Record, September, 1869; "Anomalous Human Head," St. Louis Medical and Sur-

gical Journal, March, 1867; "Medical Aspect of Iowa," Chicago Medical Journal, March 22, 1867; "Decapitation at Transverse Presentations," New York Medical Record, April, 1868; "History of Medication by Atomized Medicinal Substances," Report to the American Medical Association, 1868; "Puerperal Convulsions and Glycogenesis," Clinic Cincinnati, Ohio, April 1874; "Present Attitude of Medical Science," president's annual address Iowa State Medical Society pamphlet, 1872; "Elimination in Disease," Northwestern Medical and Surgical Journal, St. Paul, April, 1874; "Mildews on Grapevines," Iowa School Journal, July, 1874; "Physiology and Hygiene as a Branch of Popular Education," report of committee, Iowa State Medical Society, Sanitarium, New York, September, 1875; "Cellars and Diphtheria," New York Medical Record, December, 1875; "Doctors and Newspapers," before Iowa State Medical Society, rejected, Tilden's Journal of Materia Medica, New York, January, 1876; address before annual meeting of the Iowa Association Railway Surgeons, Railway Surgeon, November, 1903; "Criticism of Brown Physiology," slip to school board, Des Moines.

In 1895 he devised a "Musculotension Meter" to determine the extent of softening of muscles in paralyzes, manufactured by Truax, Green & Co., Chicago, Journal of American Medical Association. In 1889 he devised a universal stand for microscopy, photo-micrography and copying, illustrated and described in Photographic Mosaics, New York, 1890. In 1897 he successfully photographed through a six-inch Clark telescope a five-inch image of the moon, showing mountains and craters in considerable detail, without the aid of any special lens or other accessory except a box camera; Popular Science, New York, Janu-

ary, 1898. At the meeting of the American Medical Association in Baltimore, 1895, before the ophthalmic section, and also before the Columbus meeting of the American Association of the Advancement of Science, he read a paper on "Bright Light in School Rooms a Cause for Myopia," with proposed remedy and means for measuring the intensity of light in school-rooms. This paper was an attempt to show the fallacy and damage of the popular doctrine that "the more light in the school room the better," and that the abuse or careless use of such bright light, together with near vision, are responsible for a very large per cent of the myopics who emanate from the schools. The subject was illustrated by a rectilinear photographic lens, to show that back focus recedes with reduction of the diaphragm. The stimulus of bright light contracts the iris and thus reduces the pupil or diaphragm of the eye, thereby elongating the eyeball. Near vision does the same thing, and the persistent strain thus placed upon the accommodative apparatus results in the immobility which constitutes myopia or near sightedness, which being long continued as in school room work, overcomes the natural elasticity of the accommodative apparatus, and permanent and incurable myopia results. The intelligent and careful use of proper shades to modify the light, and free use of distant vision by blackboard exercises, are recommended as preventatives. Published in the Journal of American Medical Association, September 21, 1895; also synopsis in Popular Science, New York, July, 1895.

He began experiments in photo-micrography in

1883 and is one of the pioneers in that line of work. Of late he has given considerable attention to the microscopy of the natural sciences, including biology, histology, bacteriology, etc., and it was with a view to popularizing that line of work that the Des Moines School of Technology was organized in 1884, which has not yet been pushed to success. At various times he has appeared before medical and scientific societies, illustrating the subjects treated of by photo-micrographic lantern slides of his own production, in which line of work he has acquired a considerable degree of proficiency.

In May, 1877, he married Hattie Weatherby, daughter of Edmond Weatherby of Cardington, Ohio, born in Seneca, New York, and Orrel Sawyer Weatherby, a native of Yates county, New York. Three children have been born to the union, Dalton Arthur, born December 19, 1884 being the only survivor, who is manager of a large fruit association in California.

In religion Dr. Field is Calvinistic Presbyterian; in politics a prohibition republican.

Dr. Field has been no small factor in the building of Des Moines. He located and gave the ground for Eleventh, Twelfth and Thirteenth streets from University avenue to Forest avenue. He has built more than a mile of paving, more than a mile of sewers, more than a mile of sidewalks, more than a mile of curbing at an outlay of more than sixty thousand dollars. In addition he has built nineteen good eight and nine room houses that are among the good residences of the city. They are well shaded by old gigantic elms, some of which have a circumference of fourteen

feet three feet from the ground, and with branches that spread more than eighty feet. By buying small places north of North street he has been enabled to locate and establish Eleventh, Twelfth and Thirteenth streets to Forest avenue. All this he has done single handed and alone and without misunderstanding or controversies. In business he has been careful to have a clear understanding to deal only with those of good business reputation and to be always ready to perform his part of the contract to the letter.

Retrospectively, Dr. Field can say that if he could live his life over again the chances are that on the whole he would not be likely to do better. While he is conscious of having prolonged some useful lives, he is conscious also of many shortcomings in which he did not do his best, and in which he might have been more kind and considerate to his friends and to those near and dear to him; and he is not unmindful of the scores of noble and faithful horses that in seventy years of active life have been helpers and in hundreds of instances his only companions.

DR. WILLIAM WATSON

William Watson, M.D., for almost half a century one of Dubuque's most prominent physicians, was born in Leeds, England, May 14, 1826. He was the son of Joseph and Ann (Metcalf) Watson. When he was a year old the family immigrated to the United States, settling in Middletown, Connecticut. Four years later the Watsons, removed to Onondage county, New York, where they remained until he was eighteen years of age. Here he received a common school education. In 1844, William hearing the call of the

West went on alone to Ohio where he taught a district school. Soon moving on however, he took a lake steamer one sunny spring morning and came to Beloit, Wisconsin, settling on a farm some sixteen miles from that frontier town. After working hard for two years at the carpenter's trade, which he had managed to learn back East, he saved sufficient money to provide for himself the opportunity of attending the Beloit Seminary for one year. This year of schooling was indeed a happy one for our subject, for working at his trade mornings and evenings and Saturday afternoons, he combined within the space of a single day the experience that comes not only from the study of books, but also from the wider fields of actual labor among men of many classes. Two years after his first arrival in Wisconsin, Watson's father came to join him in the new region.

In 1849, Watson commenced reading medicine in the country and twelve months later went back to Beloit to read with Dr. E. L. Clark. The following winters, in 1851-2 he attended a course of lectures at Rush Medical College, Chicago. With this preliminary medical education he began the practice of medicine in the small town of McGregor, Iowa, the first physician to locate at that place. Eighteen months later, with the stern experiences of the early doctor picked up amidst the hills of McGregor, he attended a second course of lectures at Rush Medical College, graduating with honor in February, 1854. Two months after his graduation he came to Iowa, and according to his own statement "stuck out a shingle in Dubuque in 1854." After a few months in Dubuque,

Dr. R. S. Lewis, at that time a prominent physician of the city, recognizing his worth both as a physician and a man, formed a partnership with the energetic young doctor and that partnership was dissolved only by the death of the white-haired Lewis on the tenth of September, 1859. From that date Dr. Watson was always alone in practice and rapidly built up a medical business the equal of many of our leading physicians or surgeons of the present day. No man in Iowa has been more assiduous in the duties of his profession.

With the outbreak of the Great Rebellion, William Watson hearing the call of his country, entered the army as a surgeon of the Eleventh Iowa Infantry, on the 20th of October, 1861. On March 4, 1863, after active service on the field he resigned from this post to accept the position of assistant surgeon of United States Volunteers under appointment of President Lincoln and was immediately commissioned by the secretary of war for responsible hospital duties at Memphis, Tennessee. In August of the same year he was placed in charge of the Jackson hospital, the next month was promoted as surgeon of volunteers and ordered to Louisville, Kentucky. In February, 1864, he was placed in charge of the Crittenden Hospital, and thirty days later sent to Rock Island, Illinois, to take charge of the post and prison hospitals located there. It was an important assignment, requiring great diplomacy and tact. He remained in charge at Rock Island until mustered out on the twentieth of October, 1865. Returning to Dubuque, he received a brevet commission of lieutenant-colonel leaving the army with a truly

bright record. Governor Kirkwood when he entrusted the care of a regiment to Dr. Watson made no mistake in his man, for later we are told that if there was a place where disaster had caused an accumulation of sick and dying, or if lack of foresight had failed to arrest the spread of disease, or to provide for the wounded, it was to Medical Officer Watson they turned with confidence for assistance and support.

In politics Dr. Watson was a democrat, until the republican party was organized, at which time he changed his view and clung tenaciously to the latter party. He never sought office. The doctor was an Odd Fellow and was a representative to the Grand Lodge on numerous occasions. He was a member of the Dubuque County Medical Society, of the State Medical Society and served as president of both. He was a president of the State Medical Society in 1868 when it held its first annual meeting at Des Moines. He served as delegate to the International Medical Congress which met at Philadelphia, in 1876. As a parliamentarian in the Iowa State Medical Society he was a recognized power. His knowledge of the constitution and by-laws of the State Society, keen analysis and recollection of yearly amendments, has probably never been equalled. In the meetings of the American Medical Association, Watson of Iowa, when he arose to speak needed no introduction. In this state Dr. Watson is especially remembered for his sterling worth as a man, for his keen enthusiasm in his work, splendid memory and general prominence in affairs of the Iowa State Medical Society. He has written a number of valuable historical sketches of some

of the lives of the early pioneer physicians. For years he remained the nestor of the Dubuque County Medical Society.

Dr. Watson was first married in Portland, Maine, in November, 1860, to Miss Lucy Giddings, who died on the 13th of March, 1862, leaving one child, Fred. He was married a second time on the fourteenth of September, 1868 to Miss Lucy F. Conkey of Dubuque. He remained in active practice in Dubuque until 1901. Since then, and up to the time of his death he traveled extensively, visiting in the course of his wanderings every state in the union. Hale and hearty to the end he was a splendid type of a true gentleman of the old school. His aristocratic appearance on the streets of Dubuque is oft remarked by the younger generation of physicians. He died on the twenty-first day of November, 1910, at the home of his son F. J. Watson, Thatcher avenue, River Forest, Chicago. His body was brought to Dubuque and buried in Lindwood cemetery. His passing marks the last of our early Iowa doctors many of whom were engaged in laying the foundation of city and state as well as practicing their profession.

DR. MARTIN H. CALKINS

Through the courtesy of Mrs. Mary Calkins Chassell, we have been able to secure important data relating to the life of her father, Dr. Martin H. Calkins, who was an early physician in Wyoming, Jones County, Iowa.

It gives us a deep sense of pleasure to record the life and work of one of that group of earnest men who came to Iowa in the early days of its history and helped to lay a solid foundation upon

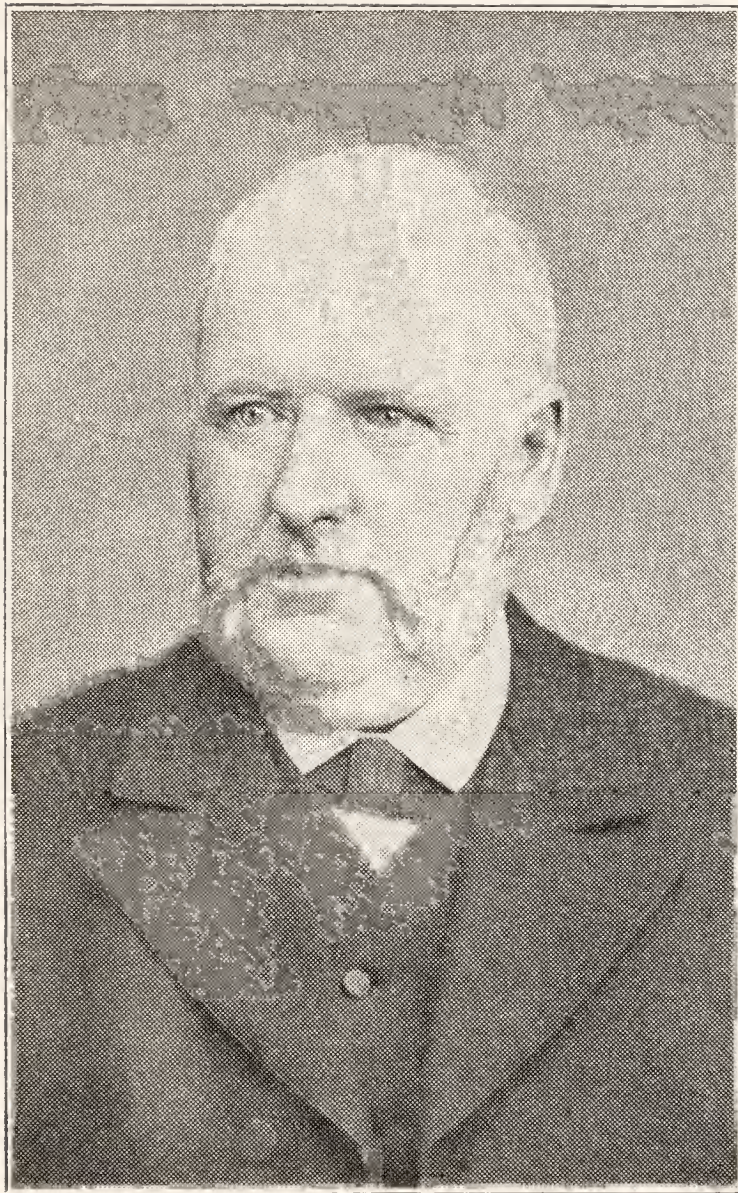
which to build a commonwealth. It is also equally a pleasure to point out the facts in relation to Dr. Calkins as an exponent of the highest ideals as a practitioner of medicine. We have already written of a group of physicians who did not count financial gains as the great purpose in life, but only incidental and subordinate to service and duty. These men were strong men who gave their lives to the public, reserving only the wages of honest service to humanity and state. To commercialize their profession was abhorrent, to measure service by money standard was intolerant; they were men, true men from whom we should gain inspiration. It is not too late.

Dr. Martin H. Calkins was born near the town of Mexico, Oswego County, New York, September 15, 1828. He was of Mayflower and Colonial ancestry on both the maternal and paternal sides. He was educated in the common schools and at the age of seventeen began teaching in the country schools and later in the City of Oswego. He was teaching in that city when the first train of cars arrived. He held a teachers state certificate which was number six in New York State.

After reading medicine in the office of Doctors Bowen and Dayton in Mexico, he took a course in the College of Medicine in Geneva, New York, completing his medical studies in the University of New York City.

He commenced practicing in Constantia, New York. He was married November 8, 1855 to Miss Lucinda Loudon of North Bay, Oneida County, New York.

On the 14th of June, 1856, he came to the new State of Iowa and after spending a few weeks in



DR. MARTIN H. CALKINS

Maquoketa came to Wyoming in Jones county which was then a town of a dozen houses, but hopeful and growing rapidly. The surrounding country was a most beautiful rolling prairie, rapidly being peopled by settlers who were busily engaged in breaking the virgin soil and laying the foundations for the beautiful homes and farms of Jones county.

The young Doctor built a dwelling on a block cornering on Main and Washington streets. It was modest in size and the lumber was black walnut. Here on these same lots but in a more pretentious house built in later years, Dr. Calkins resided and practiced his profession for nearly fifty years. As a physician he was eminently successful, and held his very large practice perhaps as much by his social, genial strength of character and magnetic influence and the sunshine that always entered the sick room with his presence, as by the administration of drugs.

His personality was a force for good not only in the sick room but in the entire growing community, and he was looked up to as a safe adviser and counselor. During his long practice, he responded faithfully and cheerfully to all calls and we have no knowledge of his ever pressing his patients for bills, or invoking the courts for assistance in collecting fees from those who should pay, but did not. It was often said of him that he never oppressed the poor, or failed in fully performing every obligation imposed upon a medical practitioner, and because of these characteristics he held the love and respect of the people.

In 1862 acting as a mustering officer, he administered the oath of allegiance and mustered

into the state militia, a company of eighty-nine men who afterwards formed Co. K, 24th Iowa Infantry and served their country during the Civil War. Dr. Calkins erected a monument in Wyoming to these men and on it their names are inscribed. He also acted as one of the state commissioners in the year 1862-3 to go to the Southland and take the vote of the soldiers then in the field.

Dr. Calkins had but little of the politician in him and never sought office. But when the town of Wyoming was incorporated, he was unanimously chosen mayor. In 1881 he was nominated as the Republican candidate to represent the county in the lower house of the state legislature. The Democrats making no nomination, the Doctor was unanimously elected. Two years later he was re-elected, and although opposed by a leading democrat, polled in Wyoming township 200 out of 211 votes cast. In the legislature, he was true to his party and to his conscience. He was one of its fifty-two members who voted for the prohibitory law. He led the house in the matter of oil inspection law and had opposed to him one of the most active and unscrupulous lobbies who went so far as to hide the bill after it was returned from the senate. But Dr. Calkins called a halt during the last hours of the assembly, had the bill searched for, found and put upon its passage, and passed much to the surprise of the lobby who thought the matter disposed of for that session. The revenue from this bill to the State of Iowa amounts to a larger sum annually, to say nothing of the safety which it guarantees.

Dr. Calkins was a writer of unusual ability and

every day for many years wrote upon some subject, either scientific, historical or literary as a personal study. In these moments he forgot not the town and vicinity of his adoption, but gathered together in chronological order the reminiscences of the early days of the settlement of Wyoming town and township, weaving a most interesting history that formed a course of lectures delivered by him to his towns people about 1878. So fully had the Doctor covered the ground, that, in 1878, (and in a later history) this history of Dr. Calkins was incorporated into the volumes, the editors saying the ground had been fully covered by the Doctor, and, in language and thought, was superior to anything the editor could hope to place in the volumes.

It was a high compliment to the hard working physician who had thus kept the annals of his town and vicinity in its early days, and made for Dr. Calkins a monument as the pioneer historian of Wyoming, that will live when the marble column is in dust.

He was a modest man, living the life of one devoted to his profession, and while his name may not be found on the church rolls, he followed closely the golden rule of the Master in his daily life as an obligation due—one to the other—among all people. His upright life, courteous manner and kindly daily life set a standard of good living to generations of young people in the community, that has been for the betterment of the social life of Wyoming and Jones county.

He was out-spoken and fearless in support of moral reforms and with both pen and voice declared his position on questions of good govern-

ment. As a man, Dr. Calkins was gifted with a large and comprehensive mental endowment and scholarly culture. He was large of physical frame and larger of mind and heart, honest, upright in his dealings with his fellow men; cheerful, warm and open hearted, approachable and companionable, performing his duty diligently with contentment and resolution. He possessed a vigorous personality. His unfailing kindness and generous impulses, his devotion to his profession, his proverbial and spicy good humor and genial disposition, his kindly ministrations to the needy and those in distress of mind, coupled with his sound judgment, wide experience and independence of thought and action made Dr. Calkins beloved as a man and citizen to a degree seldom realized by human experience.

For many years, he served on the board of pension examiners in Jones county and as local surgeon for the C. M. & St. P. R. R.

His practice and the superintendency of his farms made his life one of constant activity. At the time of his death he owned a farm in New York State which had been in the family for one hundred and twenty-seven years.

Dr. Calkins died September 27, 1909. Mrs. Calkins died December 25, 1915. They are survived by two daughters: Elva Calkins Briggs (Mrs. W. E.) Minneapolis, Minnesota. Mary Calkins Chassell (Mrs. E. D.) Wyoming, Iowa. Two grandsons, Martin Calkins Briggs, a business man of Minneapolis; Walter Charles Briggs, a student in Yale. One grand-daughter, Mary Calkins Briggs, a student in high school in Minneapolis.

DR. CHARLES CHUNN WARDEN

Dr. Charles Chunn Warden was born November 20, 1816, Maysville, Mason county, Kentucky. Died February 14, 1902, Ottumwa, Wapello county, Iowa.

Oldest child in the family of Richard Henry Warden and Elizabeth Charity Chunn, who were natives of Virginia.

About 1834 the family followed the beaten track into Ohio. On the death of his father, Charles, whose education had been obtained in the common schools of Kentucky and Ohio, supplemented by attendance at an academy in Greensburg, Indiana, engaged in the drug trade in the last mentioned place. He soon commenced the study of medicine with Dr. Fogg as his instructor. He continued his studies for two years and then entered the Ohio Medical College at Cincinnati after which he entered a partnership with Dr. Fogg, which was terminated by the death of his partner six months later.

In the spring of 1843 his broken health induced him to take a trip West and he arrived in Wapello county on July 3, 1843.

When it became known that he was a physician, he was called on to prescribe and his increasing practice induced him to become a permanent resident and was the first physician to locate in Wapello county.

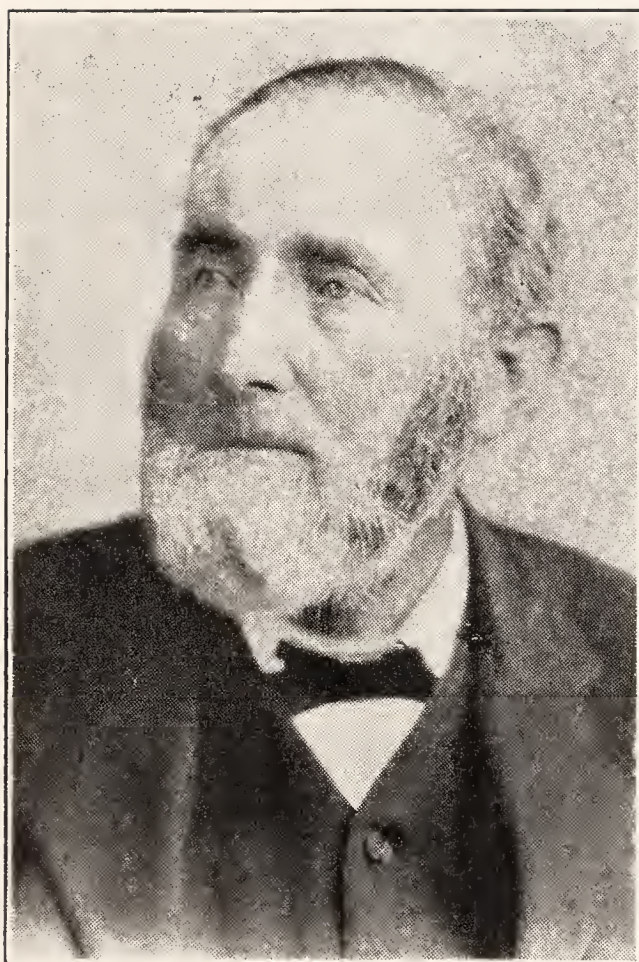
Dr. Warden followed the active practice of medicine for thirteen years and after that time engaged in the drygoods business. Much of his time was devoted to educational interests and for twelve years he was president of the board of education in the public schools of Ottumwa, and

for four years was a member of the board of trustees of the agricultural college at Ames, two years of that time acting as chairman.

Doctor Warden belonged to the type of pioneer which has built the State of Iowa—bringing to the frontier the integrity and sagacity which bind together the best in the struggling settlements and cementing the foundations of our commonwealth, and his philosophic acceptance of the unrecorded hardships of sickness and debt and exposure was an inspiration to his neighbors. The mute reminders of his early struggles, his shabby saddle bags, his rusty surgical instruments, his mortar and pestle, his matriculation cards to the Ohio Medical College are still treasured by the surviving members of his family who reside in Ottumwa. His name is to be found on the rolls of the Iowa State Medical Society, 1858, and the Wapello County Society of which last he served his term as president.

To him and others who have seen the wilderness fade away and cities spring up, the present generation owes a great debt.

It was the Editor's privilege to be connected with the State College at Ames when Dr. Warden was a member of the board of trustees and has a clear recollection of the usefulness of his services to the institution, particularly in relation to the health and welfare of the students. At that time public health matters, received but little consideration. There was no state board of health then, and no precautions were taken to prevent the spread of infectious diseases. All the students at the state college were lodged in one great building, and as college physician, we had great



DR. CHARLES CHUNN WARDEN

difficulty in controlling the spread of infectious diseases, as measles, scarlet fever, and diphtheria. Through the influence of Dr. Warden the college physician was made health officer and endowed with all the authority the law would permit; which was little enough you may be sure. This action of Dr. Warden was confirmed by Dr. W. S. Robertson, when the state board of health was formed, who was the first president of the board, and made the college physician health officer of the college under state authority.

We are indebted to the courtesy of Mrs. D. C. Brockman of Ottumwa for most of the data relating to her father Dr. C. C. Warden.

DR. JEFFERSON WILLIAMSON

Dr. Jefferson Williamson was born in Adams county, Ohio, March 31, 1827. Graduated in medicine in 1852 from the medical department Western Reserve University. Came to Ottumwa and entered upon the practice of medicine in November, 1852, where he practiced continuously fifty-one years. He died in Ottumwa January 12, 1904 at the age of nearly seventy-seven years.

Dr. Williamson was a polished gentleman holding to high civic and professional standards. Progressive in his views of medicine, he became recognized as an ideal family physician. Although he made no special claims as a surgeon he had the courage in 1881 to perform an operation for a large ovarian tumor with a successful result; at a time when the operation was looked upon as a doubtful undertaking.

Dr. Williamson was a constant attendant of the meetings of the State Medical Society and was an inspiration to the younger members. He

was active in the business of the society and his usefulness caused his name to appear at one time or another on the most important committees throughout his long membership of forty-five years. In 1872 he was elected president of the Society.

The profession of Ottumwa has been particularly distinguished for its loyalty to high ideals to which the influence of Dr. Williamson was an important factor.

DR. SENECA BROWN THRALL

Dr. Seneca Brown Thrall was born in Utica, Licking county, Ohio, August 9, 1832. His father, Dr. H. L. Thrall was for many years a professor in Kenyon College, and in Starling Medical College, Columbus, Ohio. Dr. Seneca B. Thrall graduated A.B. at Kenyon College, received his A.M. degree in 1855, and graduated in medicine from the University of New York, 1853. As was the custom at that time, he read medicine in his preceptor's office (his father).

Dr. Thrall received a liberal education both in arts and medicine, as it was thought in those days, and was well fitted for a career of usefulness. His energy and active habits of life brought unusual success. He commenced practice with his father and after two years, with his father and one additional year of practice at Belle Center, Logan county, Ohio, he located in Ottumwa in May, 1856.

In 1859, Dr. Thrall became a member of the Iowa State Medical Society and in 1869 was president. In 1873, he was elected secretary of the Society in which office he served until 1877 in a most efficient manner. For nearly thirty

years, Dr. Thrall was one of the most active members, watchful and uncompromising in his opposition to medical politics which had for its purpose the advancement of selfish ambition. For many years two medical schools factions struggled for supremacy in the councils of the society, leading to much ill-feeling, but Drs. Thrall, Williamson, Watson and others were always on guard. The year Dr. Thrall came to Ottumwa he married Miss Mary Brooks and together they builded a home where he died January 20, 1888, fifty-six years of age.

In 1862, Dr. Thrall was appointed a surgeon to the Keokuk Military Hospital, and was soon commissioned surgeon to the Thirteenth Iowa Infantry and continued in the service until May, 1864.

DR. JOSEPH CRAWFORD HINSEY

Dr. J. C. Hinsey was born in Butler county, Ohio, June 9, 1829 and died in Ottumwa, April 10, 1892. Graduated from Rush Medical College in 1851 and from the University of Pennsylvania in 1854. Located in Ottumwa in 1856.

In 1862 Governor Kirkwood appointed him surgeon to the enrollment board for the fourth congressional district and he served during the war.

Dr. Hinsey became a member of the State Medical Society in 1859 and was president in 1887. Dr. Hinsey was one of the few surgeons in Iowa to perform an ovariectomy in pre-antiseptic and pre-aseptic days. The writer recalls the interest manifested in the days before 1880 at the presentation of these wonderful operations.

JOHN C. HUGHES, M.D., Keokuk

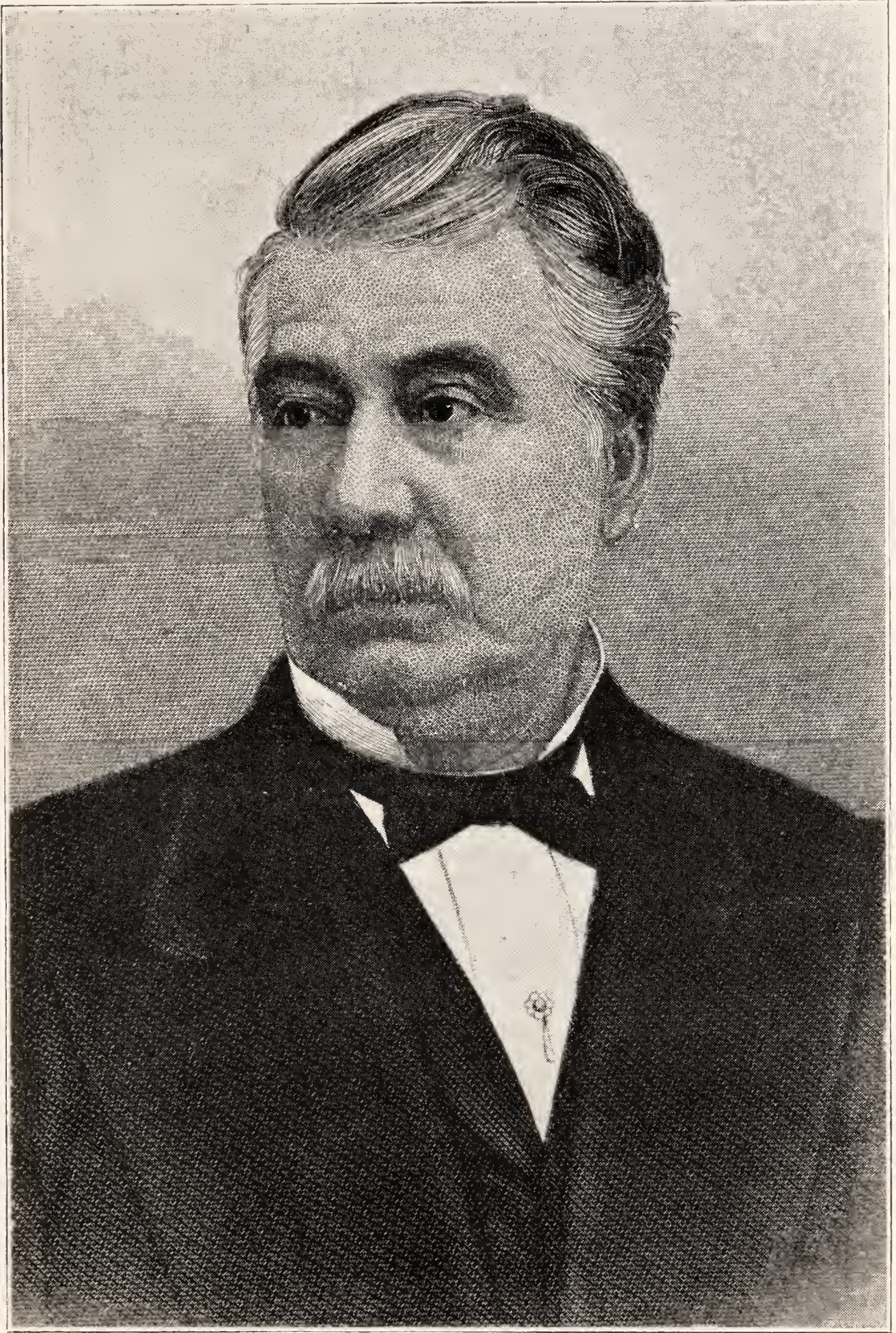
Dr. John C. Hughes, was born in Washington county, Pennsylvania, April 1, 1921, and died in Keokuk August 10, 1881. Dr. Hughes represented the type of strong men who came to Iowa at a relatively early day.

It is a curious and interesting fact that Iowa grew into a state without a definite plan, and apparently made the best of things as they came along. It is unfortunate perhaps that Iowa developed without much regard to the experience of older states, but rather prided herself on her independence of precedent and often adopted methods tried out and abandoned by other states, frequently no doubt at a great expense of time and resources. Happily, here and there, strong men came forward with a vision to the future to direct the ignorant and selfish who gave little thought to the days to come.

It does not appear that Dr. Hughes was particularly active in political affairs, but devoted his energies to developing and co-ordinating the activities of his profession which he so ably represented, and to welfare service of the city in which he lived. During his lifetime Keokuk was the recognized medical center of Iowa.

In 1850 the Keokuk College of Physicians and Surgeons was located in Keokuk after migrating from La Porte, Indiana, in 1846 where it was born, to Madison, Wisconsin, 1847; Rock Island, 1848; Davenport, 1849; to Keokuk its permanent home, 1850.

Dr. Hughes studied medicine in Baltimore, Maryland, with Dr. Joseph Perkins and graduated from the University of Maryland in 1845.



DR. J. C. HUGHES

He began practice in Mt. Vernon, Ohio. In 1850, he came to Keokuk and was elected demonstrator of anatomy in the medical school which was soon to become recognized as the medical department of the Iowa State University. In 1851 he was made professor of anatomy. In 1852 was elected dean of the faculty and in 1853 professor of surgery which position he held to the time of his death in 1881.

The duties of his office as dean involved a wide range of activities. A medical college sixty or seventy years ago was in a measure a business institution. It had no endowment fund, and was generally owned by a small group of men who sought to provide a "drawing faculty" to attract students and provide money in various ways; student fees were mainly relied upon to pay expenses and provide a return on the money invested.

Dr. Hughes was a man of much tact and was fortunate in establishing friendly relations with the profession of Iowa and neighboring states. The requirements for entrance and for graduation were not high and the success of the school was measured more by the number of students and the personnel of its faculty than by its efficiency in preparing young men for scientific medical practice.

Dr. Hughes was appointed surgeon general of the state by Governor Kirkwood at the outbreak of the Civil War; a position he held until its close. He was chairman of the Board of Medical Examiners and did much to aid the governor in organizing the medical service of the Iowa regiments.

During this service, he was in charge of the Army Hospital at Keokuk.

Dr. Hughes was elected president of the Iowa States Medical Society in 1856 and again in 1866, he and Dr. Thomas Sivester were the only men elected twice to that office. Dr. Hughes was made chairman of the section on surgery at the Richmond meeting of the American Medical Association and was a charter member of the American Surgical Association.

Dr. Hughes was a skillful surgeon and an able diagnostician. He was also a man of affairs and enjoyed an enviable reputation and influence throughout the state. He was a member of the Iowa branch of the Christian Sanitary Association and rendered valuable service as such to the soldiers at the front and in the hospitals during the Civil War.

He was editor of the first medical journal published in Iowa under the name of the Iowa Medical Chirurgical Journal, and later changed to the Iowa Medical Journal. Altogether, Dr. Hughes was easily the surgeon standing first in the history of Iowa.

DR. HENRY CLAY BULLIS

Dr. Henry Clay Bullis of Decorah was born in Clinton county, N. Y., November 14, 1830, died in Decorah, September 7, 1897. Dr. Bullis was a man of varied experience and activities. From the age of nineteen to twenty-one he taught school in winter and worked on his father's farm in summer. When he had reached his majority he added to his previous labors the study of medicine. After six years of teaching, farming and studying medicine he attended two courses of

medical lectures at the Vermont Medical College at Woodstock and graduated in the summer of 1854. In 1887 he received an additional degree from Jefferson Medical College, Philadelphia. Dr. Bullis came to Decorah October 28, 1854, and for one month taught school when he entered upon the practice of his profession, which he followed for more than forty years. Decorah was then a small village in an unsettled country save here and there a farmer who was locating a home. Dr. Bullis received but a limited education yet with energy, accumulated experience and exceptional executive ability, he was fitted to extend his activities beyond the routine of an early country practitioner. He became active in local affairs and in 1865 he was appointed United States examining surgeon for pensions which position he held until 1876 when he resigned to accept an appointment as a member of the Sioux Commission. Earlier, or in 1856, he was appointed by Judge Reed, Commissioner for the sale of intoxicating liquors which position he held for one year when this office was abolished. A little later the office of county superintendent was created when Dr. Bullis was elected in April, 1858 to fill it, he being the first incumbent, for a period of two years. In October, 1863, he was elected county supervisor serving two years, the last year as chairman of the board. In the fall of 1865 Dr. Bullis was elected by the republican party to represent Winneshiek county in the state senate, at the end of a four year term he was re-elected. While in the senate he served as chairman of the committee on claims, and also as chairman of the State University committee. He

devoted much time to the interests of the university and was a moving spirit in building it on a solid foundation and served for eighteen years as regent, declining re-election. In the middle of his second term as state senator and while serving as president, he was nominated and elected lieutenant governor by the republican party. It was in August, 1876, that President Grant appointed Dr. Bullis a member of the Sioux Indian Commission which was created for the purpose of purchasing the Black Hills Reservation, one of the important facts in the political history of the country in which Dr. Bullis had an active part. In 1878 he was appointed by President Grant, special United States Indian Agent which position he resigned after nine month service. In April, 1883, he was appointed special agent of the General Land Office but resigned after eight months service. Both these offices involved traveling and exposure beyond his strength hence his resignation. In 1880-81 and in 1889-90 he served as mayor of Decorah. In the latter term he resigned to accept the appointment as postmaster which position he held four years. Was president of the Iowa State Medical Society in 1876.

Dr. Bullis was married September 11, 1854 to Miss Laura A. Adams of Champlain, New York, who died in 1861. In June, 1863, he married Miss Harriette B. Adams, a sister of the first wife.

Few physicians have had a wider or more varied experiences than Dr. Bullis. The writer has a clear recollection of Dr. Bullis. He was a man of attractive personal appearance; a man of little more than average height, rather slender but

erect and active; dressed in the conventional clothes of the professional man of that day, a ready and fluent speaker, and was admired by the younger men of the profession whose ideas were not disturbed by the revelations of the bacteriologists.

DR. J. W. SMITH

Dr. J. W. Smith was born in Franklin, New York. Graduated from the medical department of Yale University in 1856. Located in Charles City, Iowa, March, 1857. Dr. Smith became a member of the Iowa State Medical Society in 1872 and was one of the most active members in the work of the society. He was a recognized surgeon in northern Iowa and appears to have been the first in this state to perform a supra-vaginal hysterectomy. In May, 1872, Dr. Smith removed a fibroid tumor of the uterus by "gastrotomy," including the uterus, which weighed fifteen pounds. "This operation was not advised but was done at the urgent solicitation of the suffering but heroic woman aged thirty-two. Death occurred on the sixth day." We have a vivid recollection of Dr. Smith who was known in the State Society as "irrepressible Smith" for the reason no doubt, that no paper passed without "Smith of Floyd" taking part in the discussion. In the American Medical Association he was known as "Smith of Iowa" for the same reason. He was rigid in his temperance views and lost no opportunity to bring prohibition into the discussions of the society.

DR. CHARLES W. DAVIS

Dr. Davis was born in Troy, Ohio, January 4, 1823, and died in Indianola July 20, 1881. Dr.

Davis graduated A. B., Wabash College, Crawfordville, Indiana, in 1848, and M.D. from Rush Medical College, 1853. After practicing at Carlisle for three years, removed to Indianola in 1856 where he practiced until the time of his death.

On October 15, 1862, Dr. Davis was mustered into the United States service as surgeon of the Thirty-fourth Iowa Infantry. After active service under General Sherman, he resigned November 25, 1863, and resumed practice in Indianola taking an active part in professional matters.

In 1869, Dr. Davis became a member of the Iowa State Medical Society and in 1876, a member of the American Medical Association.

DR. ARCHIBOLD STEPHENS MAXWELL

Dr. Archibold Stephens Maxwell located in Davenport in 1852. We are in part indebted to Dr. A. W. Cantwell for the following biographical sketch of Dr. Maxwell, who in accordance with resolutions adopted by the Scott County Medical Society April 3, 1884, prepared and published in the Iowa State Medical Reporter, Volume 1, page 137, an account of Dr. Maxwell's work.

Dr. A. S. Maxwell was born in Tuscarawas county, Ohio, June 22, 1818. As a boy, he worked on a farm, but in 1834 he gave up farming and entered the printing office of the "Findley Whig." Three years later became foreman. In 1839 entered into partnership with Colonel John Meredith in publishing the "Richland Shield and Banner," Mansfield, Ohio.

During his leisure hours Maxwell read law in the office of Judge Brinkerhoff. He now real-

ized that the education obtained in the country district school was not sufficient to meet the requirements of the life set before him and entered the Ashland Academy from which he graduated with honor. In the political campaign of 1842, he was attacked with laryngitis which so affected his voice that he abandoned the practice of law and entered the office of Dr. John M. Cook of Berlin, Ohio, to study medicine and graduated from the medical department of Hudson College at Cleveland, Ohio, in 1847.

After graduation Dr. Maxwell entered into partnership with his preceptor, Dr. John M. Cook, married his step-daughter and remained with him five years. The duties of a country practitioner were too exacting for Dr. Maxwell and in consequence of failing health, he prepared himself for the treatment of diseases of the eye, nose and throat, and located in Davenport, Iowa, in 1855.

When Dr. Maxwell located in Davenport, he invested in real estate at boom prices, and when the financial crisis of 1856-1857 came, nearly all his property was swept away, and he was forced to resume general practice, with much success.

Soon after the beginning of the Civil War, Dr. Maxwell was appointed by his early friend, Gov. Kirkwood, surgeon-in-chief of Hospitals No. 6 and 8 at Keokuk. During this service, he filled the chair of physiology and pathology in the Keokuk Medical College. Later, Dr. Maxwell was ordered to New Orleans for hospital work.

In 1864 Dr. Maxwell resigned his commission and returned to Davenport to resume general practice. The exactions of a large practice at last so impaired his health, that he was led to

seek a warmer climate and he purchased a fruit farm in southern California and combined fruit farming with the practice of medicine. He suffered an exposure while visiting patients that resulted in an attack of pleurisy from which he died March 13, 1884.

PETER N. WOOD, M.D.

Dr. Peter N. Woods of Mt. Pleasant was born in Gremaille, Stark county, Ohio, September 8, 1829. Received his preliminary education at Vermillion Institute, Haysville, Ohio, and the Ohio Wesleyan University, graduated in medicine at Cincinnati June 10, 1854. Practiced at Rome, Ohio, until May, 1856, when he removed to Fairfield, Iowa. In 1879-80 he was a graduate student in Rush Medical College and received the degree of M.D. from this institution in 1880. In July, 1862, Dr. Woods was commissioned as recruiting officer and in August was detailed as examining surgeon for Jefferson county and in September commissioned surgeon of the 39th Iowa Infantry. In December, he was sent to the front with his regiment and served in the Tennessee campaigns until late in 1864 when he was appointed acting division surgeon on the staff of General Sweeney. In General Sherman's Atlanta campaign, Dr. Woods was placed in charge of the sick and wounded of the 4th Division of the 15th Army Corps. He was at the battle of Altoona and had charge of the hospital at that place, when Sherman marched to the sea. Later, at his own request, he was relieved and joined his regiment at Beaufort. At the close of this service, Dr. Woods was detailed as chief surgeon of

Sherman's Provisional Division until it was disbanded at Raleigh, North Carolina in 1865. He was ordered to Washington with his regiment and was finally mustered out at Clinton, Iowa.

Dr. Woods in addition to a large medical practice was also interested in various business enterprises, among the most important was the Fairfield woolen mills of which he was one of the original protectors.

Dr. Woods died March 19, 1886, from pneumonia, at the age of fifty-seven years.

DR. JOHN W. GUSTINE

Dr. John W. Gustine came to Iowa in 1854 and located in Panora where he continued in the practice of medicine until 1875, when on account of failing health, he removed to Carroll, Iowa, where he had large land holdings, intending to give his time to farm interests; but his reputation and experience as a physician rendered it impossible for him to escape certain demands on his time and strength, until in the fall of 1883, he was obliged on account of a progressive tuberculous affection of the lungs to move to Florida, but returned to Carroll where he died October 7, 1885. Dr. Gustine during a considerable portion of his professional life had struggled against pulmonary tuberculosis from which he finally fell a victim.

Dr. John W. Gustine was born in Juniata county, Pennsylvania, September 16, 1822. His father was a man of high standing in the community in which he lived; at one time was a member of Congress from his district.

Dr. Gustine commenced the study of medicine in the office of Dr. H. C. Wood of Philadelphia

and graduated from the University of Pennsylvania in 1848. He located first in Pittsburg, Pennsylvania. In 1854 he came to Iowa and located in Panora. He became a member of the Iowa State Medical Society in 1868. In 1871 he was elected treasurer, which position he held until 1877.

Dr. Gustine with a group of active members, notably Drs. Thrall and Williamson of Ottumwa, J. W. Smith of Charles City, A. G. Field of Des Moines, and Wm. Watson, assumed in large measure direction of the affairs of the Iowa State Medical Society. There were at that time two medical college factions—Iowa City and Keokuk—usually antagonistic, but if one or both assumed to control the Society then the above group made any combination to defeat the schools.

Physicians who located in Iowa, particularly in Central Iowa between 1850 and 1860 were real pioneers. The obligations of a practicing physician carried him to the homes of the sick and injured in all conditions of weather and roads; the greatest trial being the roads. In early times people lived widely apart and often at a great distance from the physician's office.

The first white men to settle in Boone county was in 1842, when two men connected with Captain Nathan Boone's expedition in 1832 to explore the Des Moines and Boone river valleys, returned and made claims near the present site of Moingona, but on account of the danger from Indians they soon abandoned their claims. The next white man to settle in Boone county was Charles G. Gaston another member of Captain

Boone's Company who located at a place known as Elk Rapids in 1846. Soon after came John Peo, James Hull, J. M. Crooks and others. In 1854, or eight years after the first real settlement of the county, came Dr. P. S. Moser to practice medicine. Dr. Moser, the only son of Dr. Phillip Moser had the spirit and courage of the typical in Charleston, July, 1829. He graduated from the University of Pennsylvania in 1852, commenced practice in Muscatine, the same year, and moved to Boonesboro in March, 1854, where he continued in the practice of his profession until his death, September 26, 1894.

Dr. Moser was a dignified professional gentleman of the old school, and in his customary dress of black broadcloth clothes, Prince Albert coat, silk hat and polished boots, was an apparently incongruous figure in a settlement eight years old, and more than 200 miles from a railroad, with a radius in which to practice of twenty-five to fifty miles over roads difficult to imagine. If any commented on Dr. Moser's dress or manners such comments were carefully guarded for woe unto him who took liberties with Dr. Moser. For many years he was called far and near in difficult and dangerous cases, so great was his reputation as a physician and surgeon. We have a record of 105 capital operations to his credit. Dr. Moser of Charleston, South Carolina, was born South Carolinian, indifferent and careless as to business or money, courteous, loyal and true, and a failure as measured by the money standards of a Northerner.

Dr. Moser was the first president of the Central District Medical Society organized at Boone

in June, 1874. He was a member of Iowa State Medical Society in 1883 but on account of his disregard of money and of business affairs his membership was irregular, he only paid his dues when he attended the meetings and his membership lapsed in the interval.

Dr. C. H. Lathrop graduated from the University of New York in 1858 and located in Lyons, Iowa, the same year. In 1861 he was appointed assistant surgeon of the First Iowa Cavalry and soon after full surgeon, in which position he served to the close of the war. His health failed and he retired from practice. Dr. Lothrop contributed several notable papers to medical literature. His most important contribution was a medical directory of Iowa which was issued in 1876. This was the first directory published of Iowa physicians.

Dr. T. J. Caldwell was an early settler in Dallas county removing there in 1853. Began the study of medicine in 1856 and graduated from the College of Physicians and Surgeons, Keokuk (State University), in 1861. In 1862 Dr. Caldwell was appointed by Governor Kirkwood examining surgeon of the militia of the county. In 1864 he was appointed assistant surgeon 23rd Iowa Volunteer Infantry which position he held until the close of the Civil War. Dr. Caldwell was not only prominent in professional activities but also in politics. He was elected president of the Iowa State Medical Society in 1881. In local and in state politics he exercised considerable influence. He was at one time state senator from Dallas county. Dr. Caldwell was not one of the builders of the Iowa Commonwealth but was active in es-

tablishing a condition of permanency and contributed to good citizenship; he was an honored and self-respecting physician and gentleman, active in medical organizations and an earnest worker in his profession. He was of striking personal address, courteous at all times, and in dress, manner and personal dignity the type of the old school physician.

Dr. M. B. Maulsby, the first president of Dallas County Medical Society, was born in Wayne county, Indiana, in 1817; attended one course of lectures at Ohio Medical College in 1842, practiced in his native county until 1854 when he removed to Dallas county.

Dr. E. Van Fossen, a graduate of Rush Medical College, located in Adel in 1852 where he practiced four years, served one term in the Iowa legislature when he retired from the practice of medicine to become a farmer.

DR. JOHN FORREST DILLON

Dr. J. F. Dillon graduated from the College of Physicians and Surgeons at Davenport, Iowa, in 1850 and became a member of the Iowa State Medical Society at its first meeting in Burlington, June 19, 1850. He also had the honor of writing the first article in the first number of the first medical journal published in Iowa. The journal was published at Keokuk and was called "The Western Medico-Chirurgical Journal." Date September 1, 1850. The first article is entitled, "Rheumatic Carditis, Autopsical Examination," by John Forrest Dillon, M.D., Farmington, Iowa. It is a very interesting article and foreshadows the future success of the author.

The following autobiographical sketch of Dr. John Forrest Dillon, afterward the distinguished Judge Dillon, is taken from a letter to Dr. Geo. F. Jenkins and published in the Iowa Medical Journal February, 1908.

"I was born in the state of New York on December 25, 1831. My father moved with his family, of which I was the eldest, to Davenport, Iowa, in July, 1838, I being then a little less than seven years of age. I lived in Davenport from that time until 1879, when I came to New York to accept a professorship of law in Columbia University, and the position of general counsel for the Union Pacific Railroad Company.

I commenced the study of medicine when about seventeen years of age in the office of Dr. E. S. Barrows, at Davenport, Iowa. Dr. Barrows was a prominent physician and successful surgeon, having been a surgeon in the United States Army in the Seminole Indian War. He had wonderful skill in diagnosis and was a bold and successful practitioner. He made very little use in his ordinary practice of any other remedies but calomel, blue mass, Dover's powder and compound cathartic pills.

A year or so after I entered the office of Dr. Barrows as a student, was formed the Rock Island Medical School, the prototype or original, as I understood it, of the present College of Physicians and Surgeons of Keokuk, Iowa, of which you are the president.

I attended one course of lectures at Rock Island. The next year the college was removed to Davenport, Iowa, where I attended a second

course and was regularly graduated in the spring of 1850 an M.D.

The professors as a body were able men, some of them men of great learning and even genius. Abler teachers than Professor Richards who taught practice, Professor Sanford who taught surgery and Professor Armor who taught physiology, it would have been difficult to find in the chairs of any contemporary medical institution.

I happened to attend the first meeting of the Iowa Medical Society in 1850, at Burlington, in this way. Having been graduated I desired to seek a place in which to practice my profession and I consulted Professor Sanford, having an admiration and affection for him. He said, "I have lived many years in Farmington, Van Buren county, a small place on the Des Moines river, but my duties in connection with the medical college are such that I have resolved to change my residence and follow the college to Keokuk." Dr. Sanford had obtained great celebrity as a surgeon and indeed had outgrown the little town of Farmington. He suggested to me that his leaving Farmington would create a vacancy which would perhaps make that town a desirable place for me in which to locate. When I reflect that I was really under twenty years of age, without experience, the idea that I could go to Farmington and occupy in any degree the place which Dr. Sanford left seems now to me almost amusing. I resolved, however, to take his advice and so arranged my journey from Davenport to Farmington as to enable me to attend the first meeting of the Iowa Medical Society in Burlington in June, 1850.

After the lapse of fifty and seven years I distinctly recall that meeting and I regarded it then, as I have regarded it ever since, as an assemblage of men of remarkable learning and ability. Among those present were Sanford, Hughes, McGugin, Henry, Elbert, Fountain, Haines, Lowe, Ransom, Rauch, all distinguished names.

My exchequer was far from plethoric and I was obliged to practice strict economy. I rented for an office a small brick building on the crumbling bank of the Des Moines River, one story high, about twenty feet square, in a dilapidated condition, at a cost of \$4 per month. I engaged board and lodging at a boarding house kept by Mrs. Corwin, where I made my home during the three or four months I remained in Farmington, at a cost of \$3.50 per week. Among the boarders was a young lawyer by the name of Howe, who had resided in Farmington some little time. We became well acquainted and spent nearly every evening walking up and down the banks of the Des Moines River, in speculation upon what the future had in reserve for us. He was almost as destitute of clients as I was of patients.

There were at least two old established physicians in this place, Dr. Barton and Dr. Lane. How could a young man under twenty years of age expect to find employment under these circumstances unless both of the physicians were engaged or out of the place? I will mention one case with a little particularity since it was epochal, having had the effect of changing the whole current and career of my life. On the hills near Farmington, about two miles distant there was a large brickyard. On a hot August

day the men worked hard, and their skin being relaxed and their appetites vigorous, they ate a hearty supper when a cool and grateful breeze sprang up and swept the valley. These workmen sat out in it, became chilled and two or three hours afterwards were seized with violent attacks of cholera morbus. They sent post haste to town for a physician, both Dr. Barton and Dr. Lane were absent and there was nothing to do but to call on me. I had no horse or buggy of my own and if I had I would have found it difficult to have driven over the rough roads and as for many years I had been troubled with inguinal hernia, I could not ride on horseback. The last time I attempted to do so nearly cost me my life. There was no alternative but to walk to the brickyard, where I found the men in great suffering, requiring liberal doses of laudanum and stimulants and my personal attention for several hours. Weary and exhausted I sought my way home on foot and I saw the sun rising over the Eastern hills just as I was reaching my lodgings. Maybe it was the sun of Austerlitz but I didn't so regard it at that time. Two or three years ago when Dr. Lorenz of Vienna was in this country he took lunch with myself and several gentlemen, one of whom mentioned I had formerly been a physician, whereupon Dr. Lorenz evinced curiosity to know why I left the profession, and I proceeded to give him the narrative that I am now relating. When I had finished one of the gentlemen said, "Now, that you have told all about this there is one thing you have not mentioned did these men live or die?" to which I responded, "That question

has been more than once asked but I have always evaded the answer."

This night's experience set me to thinking and the next evening when young lawyer Howe and myself were taking our regular walk up and down the banks of the Des Moines River I turned to him and said, "Howe, I have made a great mistake, I cannot practice medicine in this country without being able to ride on horseback, which I am utterly unable to do. I might as well admit the mistake and turn my mind to something else, I shall read law. Tell me, what is the first book that a student of law requires?" He answered, "Blackstone's Commentaries." "Have you got them?" He replied, "Yes, I have them and the Iowa Blue books of Laws, and those are the only books I have." He was kind enough to loan me this Blackstone and I began at once to read law in my little dilapidated office.

Another event in my brief medical career at Farmington is chronicled in the first number of the *Medico-Chirurgical Journal of Keokuk*, of September 1, 1850. It is the first article and first number of that publication, entitled, "Rheumatic Carditis, Autopsical Examination," by Jno. Forrest Dillon, M.D., Farmington, Iowa," thus connecting me in a slight way with the earliest medical literature of the state.

On inquiry of the present officers of the Keokuk Medical College, I learned that they had no copy of the publication and I only succeeded in obtaining one through the kindness and courtesy of the Iowa Historical Association.

I shall not undertake to re-state the substance of that article; briefly outlined it is this: A

laborer on the public works at the small town of Croton, about five miles distant from Farmington, suddenly died under circumstances that lead to a very general belief among the people of Croton that he had died from malpractice. The post-mortem examination disclosed, however, that he died of apoplexy caused by hypertrophy of the heart. The heart was found to be nearly double the normal size and weight. It fell my lot after conducting the examination to take the organ in my hand and explain to the excited citizens the cause of the death and thus allay public excitement. The article concludes as follows:

Before taking my departure from Croton, I took occasion to give the botanic physician some salutary advice, adverted to the unenviable predicament in which his ignorance had plunged him, and endeavored to inspire him with a love for scientific knowledge, by following the example of *Le Maitre de Philosophie*, in a *Comedie* of the celebrated Moliere, in which he endeavors to impress the truth of the following sentiment upon the mind of Monsieur Jourdain "*Sans la science, la vie est presque une image de la mort.*" Whether I succeeded in convincing him of it so readily, as was the case with *Le Bourgeois gentilhomme*, the future must determine.

I have drawn up this hasty sketch of the above case for two prominent reasons, in the first place to present your readers with some additional testimony confirmatory of the frequent connection between arthritic and cardiac disease; and in the second place, to illustrate the great benefit often derivable from necroscopic examination. The

one is frequently overlooked, the other too sadly neglected.

In the fall of 1850 I concluded to return to Davenport where my mother and sister lived and take up my home with them and utilize my little knowledge of drugs and medicines and get a livelihood by opening a small drug store, which would also afford leisure time to enable me to read law. This I continued to do until the spring of 1852 when I applied for admission to the bar of the District Court of Scott County, Iowa, and on motion of Mr. Austin Corbin, a man very well-known afterwards in Iowa and elsewhere, I was admitted. The same year I was elected prosecuting attorney for the county and practiced law in Scott and adjoining counties until 1858, when I was elected Judge of the District Court of the Seventh Judicial District for the counties of Muscatine, Scott, Clinton and Jackson; re-elected four years afterward. Was then transferred to the supreme bench of the state and was re-elected six years afterwards. Before qualifying for my second term I was appointed by President Grant, United States Circuit Judge for the Eighth Judicial Circuit, comprising the states of Minnesota, Iowa, Missouri, Arkansas, Kansas, Nebraska and afterwards Colorado. I held the last mentioned office for ten years, until 1879, when I resigned the same to accept the professorship of law at Columbia University and removed East, where I have ever since practiced my profession. I find the little knowledge that I acquired of medicine and its principles not only to be a great satisfaction to me throughout my life but at times to be of utility, and I maintained a nominal connection

with the medical profession until about the period when I came to New York by delivering each year lectures on medical jurisprudence at the Iowa University to the combined law and medical classes of the institution."

PHYSICIANS WHO LOCATED IN IOWA
IN THE PERIOD BETWEEN 1860
AND 1870

WILLIAM F. PECK, M.D.

AND

W. D. MIDDLETON, M.D.*

One of the most interesting characters in the medical history of Iowa was Dr. W. F. Peck of Davenport who for many years was a dominating figure in the medical profession of this state.

Dr. Peck was born in Galen, Wayne county, New York, January 22, 1841. Received a common school education, and with this slender preparation for a distinguished medical career, entered Bellevue Hospital Medical College and graduated in 1863 with high honors.

Dr. Peck was distinguished in early life for his energy, indomitable courage, self-reliance and persistent determination to accomplish his purpose of rising to a high place in his profession.

After supplementing his medical college course with a year of hospital service in New York City, he opened an office in Davenport. It was not long that Dr. Peck had to wait for a living practice; his personal advantages, his energy, practical ability and self-reliance attracted the attention of the foremost citizens of Davenport and brought a wide circle of admirers. Dr. Peck was not long satisfied being only a practicing physician and surgeon. There were public professional duties to be performed. From being secretary of the

*We are indebted to Mrs. S. C. Plummer for much of the data concerning Dr. Middleton.



DR. W. F. PECK

Scott County Medical Society in 1866 he developed the thought of a medical department of the State University. The medical school at Keokuk had for many years claimed a loose affiliation with the State University as its medical department but Dr. Peck believed there should be a real medical department at Iowa City.

In 1868 Dr. Peck submitted some definite plans he had formed in relation to a medical school to Judge John F. Dillon who approved them and lent his cooperation. It was fortunate at this time to have the support of Judge Dillon whose name carried great weight, who was himself a graduate in medicine and at one time was a practitioner of medicine. The same year the medical department proposition was submitted to the regents and was approved. Through the influence of John P. Irish an appropriation of \$50,000 was granted and in 1870 \$54,000 was added.

After many discouragements the medical department of Iowa University was founded with Dr. Peck as dean and professor of surgery, a position he held until he retired in 1891; his death followed the same year.

During the twenty-one years of his connection with the medical school he ruled its destinies with a firm hand. Dr. Peck was much respected by the faculty, the older graduates remembering him with affection and pride as the leading spirit in the medical profession of Iowa of his generation.

Dr. Peck's activities in a public way were not confined to the University Medical School but were extended to the development of a Sisters Hospital at Davenport and at Iowa City. In 1869

Mercy Hospital was organized at Davenport and a little later at Iowa City. At both of these hospitals he was the leading influence until his death, in 1891.

At the end of Dr. Peck's first year of practice he returned to his native state and was united in marriage to Miss Maria Purdy of Butler, Wayne County, New York, a most admirable lady and generous helpmate.

Dr. Peck was a courageous and resourceful surgeon and was for many years recognized as the leading operator of his state. A curious and interesting fact may be mentioned in this connection. To the last days of his life he refused to accept antiseptic and aseptic surgery and opposed the germ theory of infection. He was an avowed adherent of the teachings of Lawson Tait, that cleanliness and rapidity of work were essential but not antiseptics or sterilization.

Dr. Peck was president of the Iowa State Medical in 1876; was a vice-president of the American Medical Association and at one time chairman of the Section on Surgery of the American Medical Association; and for many years chief surgeon of the C. R. I. & P. Ry. Co. and of the Soldiers' Orphans' Asylum at Davenport. His influence in the latter institution was of importance in establishing sanitary relations and helpful treatment to a class of unfortunates supposed to need sympathetic and sentimental considerations more than anything else of Davenport.

Dr. W. F. Peck and Dr. J. C. Hughes were charter members of the American Surgical Association.

Closely associated with Dr. Peck was Dr. W. D. Middleton of Davenport, one of the most delightful physicians the state of Iowa has produced. It was the good fortune of the writer to first know Dr. Middleton at the meeting of the Iowa State Medical Society held in Marshalltown in May, 1873. Dr. Middleton was at that time professor of physiology in the but recently organized medical school of the State University. It was under the auspices of Dr. E. F. Clapp, then professor of anatomy in the University. Dr. Clapp and the writer were students in the University of Michigan in 1867-68, and as all students listened to all the lectures, a close friendship sprang up between us, as we occupied adjoining seats, and on the pledge of Dr. Clapp we were admitted to goodfellowship which continued until Dr. Middleton died, April 5, 1902.

Professor C. E. Bessey, professor of botany, Iowa State College at Ames, conceived the idea of organizing an Iowa Academy of Science, and requested the writer to correspond with a small group of medical men in Iowa, interested in scientific matters, to meet at Iowa City for the purpose of forming the Iowa Academy. The charter members, representing the medical profession, were Dr. W. D. Middleton, Davenport; Dr. P. J. Farnsworth, Clinton; Dr. Elmer F. Clapp, Iowa City; Dr. A. G. Field, Des Moines, and Dr. D. S. Fairchild, Ames. The representatives of the University faculty were professors Heinrich, Calvin, McBride and Nutter.

At the death of Dr. W. F. Peck, Dr. Middleton succeeded him as chief surgeon C. R. I. & P. Ry. Co., which position he held to the time of his

death in 1902, to be succeeded in turn by Dr. S. C. Plummer, whose father was a distinguished physician in Rock Island.

Dr. Peck was the first chief surgeon appointed in 1875, followed by Dr. Middleton 1891 or 1902. These three chief surgeons have placed the surgical service of the Rock Island road in the front ranks of efficiency.

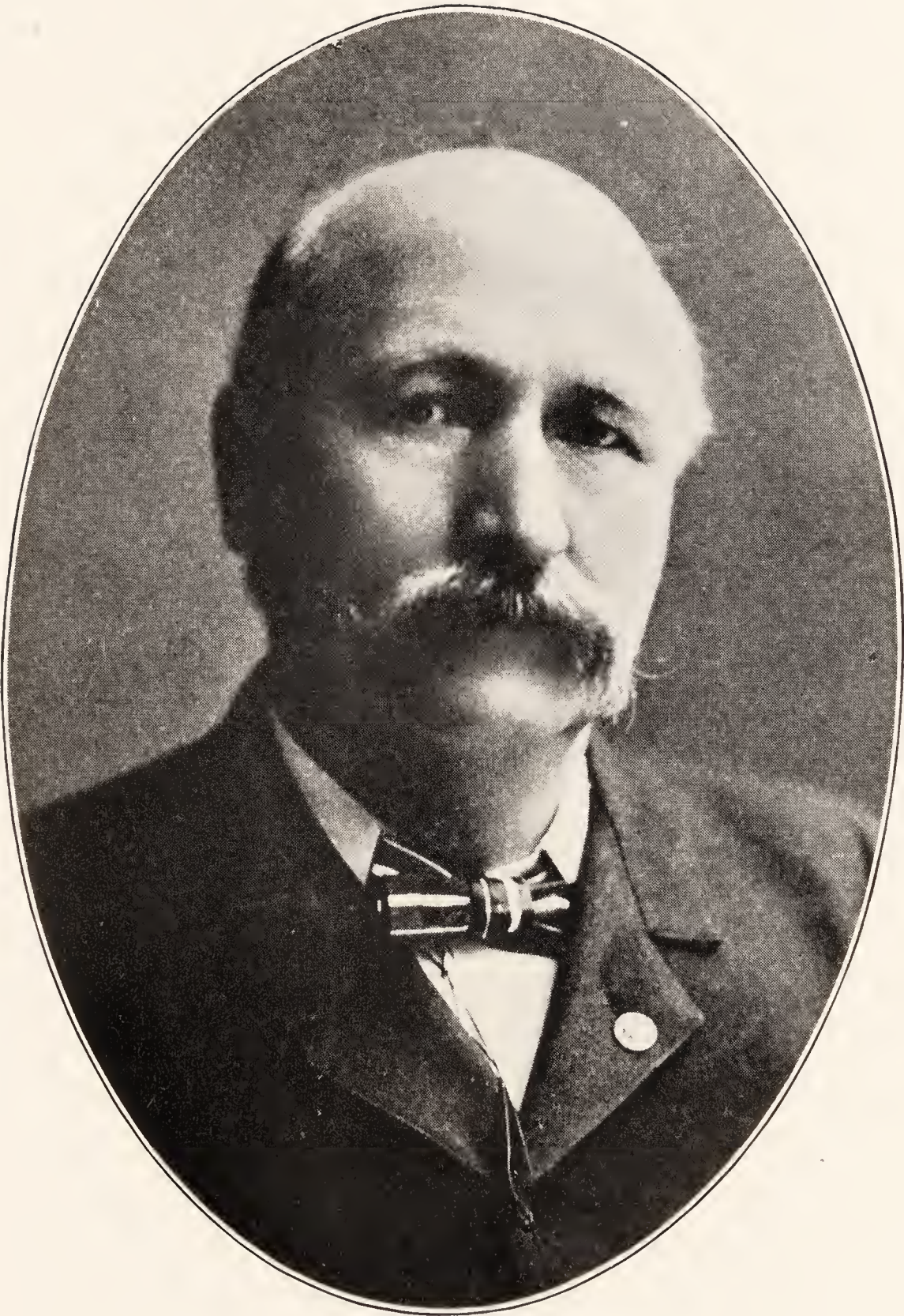
Dr. Middleton became a member of the Iowa State Medical Society in 1870 and was elected president in 1890.

Dr. W. F. Peck and Dr. W. D. Middleton will always be associated as members of the same medical family, not only in relation to the Rock Island railway and the State University, but also as leading factors in the professional life of Davenport and the State of Iowa. Differing in many respects, they supplemented each other in relation to medical affairs.

Dr. William Drummond Middleton was born April 26, 1844 and died April 5, 1902.

William, son of John and Mary Gilchrist Middleton was born near Aberdeen, Scotland. He inherited from his Scotch ancestry a stalworth and persevering disposition, and a fearless independence characteristic of his race. He had a keen sense of humor and his ready wit and joyous ways gave increasing pleasure and inspiration to those about him.

He loved nature and from the highlands and lowlands of Scotland to the forests and plains of the Western world, every tree, shrub and flower was dear to him. He knew them all by name and when much fatigued, to lie under the trees and look up, was a favorite occupation.



W. D. MIDDLETON

He loved animals, from his favorite horses to his dogs and cats.

He enjoyed fishing and sports.

His home stands a monument to his memory, not gained by investment, but by patient hard work. He said "It is a beautiful home and one would think you had been in it always, but I cannot feel entirely at home until the children have left their marks on the woodwork and furnishings."

Dr. Middleton came to America at the age of twelve, the proud possessor of the parochial school medal for excellence in scholarship. He was well versed in Latin and could quote Homer by the page. He graduated from the Davenport High School and taught in the county schools, doing all he could in his spare time to prepare himself for the future. At the age of twenty, he enlisted as a volunteer for the Civil War, Company I, Forty-fourth Regiment Iowa Volunteers, receiving at the close of the war, his certificate of thanks for honorable service, bearing the signature of Lincoln and Stanton. Deciding to study medicine, he entered Bellevue Hospital Medical College in New York City. By working hard in vacation and by close economy and sacrifice during the school year, he completed the course, graduating in 1868, beginning practice in his home city, April 6, 1868, ending April 5, 1902, thirty-four years minus one day.

Dr. Middleton identified himself with an organization of young men called the "Associated Congress." It met in the library building. They had papers, discussions and debates. He was an active and faithful member and his young friends

watched with interest as he forged his way, admiring his energy and ability.

In 1869 the medical department of the State University was organized and he was elected to the chair of physiology and microscopic anatomy, which position he filled until 1886, when elected to the chair of theory and practice of medicine. In 1891 he took the chair of surgery. The same year he became dean of the college of medicine, a position he occupied the remainder of his life. The thirtieth anniversary of his connection with the college was celebrated by a banquet and the presentation of a beautiful library chair from his colleagues in the faculty. In 1898 the students organized a society called the "Middletonian," one of the best societies in the University.

In 1871, Dr. Middleton was married to Sue Y. Modeman and their married life was blessed with six children; Mary Louise, George McClelland, Jessie McKenzie, Edward Duncan, John Gilchrist, and William Drummond.

Dr. Middleton was one of the first physicians to Mercy Hospital in Davenport and was devoted to its interests all his life, having the confidence and devotion of all with whom he came in contact. He was the founder of its training school for nurses and president of its board.

EARLY PHYSICIANS IN IOWA

DR. CHARLES HAMILTON RAWSON

Dr. Charles Hamilton Rawson was born in Orleans County, Vermont on July 16, 1828 and died at his home in Des Moines, June 27, 1884. Dr. Rawson may be regarded as the most prominent of the early Des Moines physicians and surgeons. He belonged to a family distinguished for its sterling adherence to principles of integrity, thrift and economy, and had developed under conditions and surroundings that made such qualities essential to success.

Dr. Rawson began the study of medicine with Dr. A. P. Barber, a local physician of considerable note and graduated from the Woodstock Medical College, Vermont. After practicing medicine in Canada for two years, he attended a course of medical lectures at the College of Physicians and Surgeons, New York City, where he received an additional degree of M.D. After graduating, Dr. Rawson served an internship in one of the New York hospitals.

In 1849 during the California gold fever, he secured the position of ship's surgeon on S. S. Lewis plying between New York and San Juan and San Francisco via Cape Horn. He served on this ship until it was wrecked near Acapulco. After the loss of his ship, he served as surgeon in the Marine Hospital at San Francisco for a period of two years. He then returned to Vermont and in 1856 located in Des Moines. In 1861, Dr. Rawson was made surgeon of the Fifth Iowa Infantry and later appointed brigade surgeon and

served until impaired health compelled him to resign. He then resumed practice in Des Moines.

In November, 1865, Dr. Rawson married Miss Mary E. Blake of Swanton, Vermont. In 1868, he became a member of the Iowa State Medical Society and later of the American Medical Association.

Dr. Rawson was a quiet and reserved man of sound judgment, conservative in business and in professional relations, and successful in both.

DR. R. J. FARQUHARSON

Dr. R. J. Farquharson, the first secretary of the Iowa State Board of Health, was born in Nashville, Tennessee, July 16, 1824. Received his preliminary education at the University of Nashville and graduated in medicine from the University of Pennsylvania in 1845.

Dr. Farquharson, after graduation, spent two years in hospital service at New Orleans. In 1847 he was appointed assistant surgeon in the United States Navy, but resigned his commission in 1855. During the Civil War he served as surgeon to Andy Johnson's regiment and during the campaign of 1863-4 had charge of the United States Military Railroad Hospital at Nashville. In 1869 he removed to Davenport, where he resided in 1881, when he was elected secretary of the Iowa State Board of Health (Dr. L. A. Andrews serving temporarily at the organization May 5, 1880), and removed to Des Moines, where he resided until his death September 6, 1884.

Dr. Farquharson was a scientific and scholarly gentleman, possessing a wide knowledge of medical literature in several languages. He was a

member of the Iowa State Medical Society; the American Medical Association; the American Health Association; the American and the English Associations for the Advancement of Science; the American Antiquarian Society and the representative for the West in the Institution Ethnographic.

DR. JUSTIN F. SIMONDS

Dr. Justin F. Simonds died January 3, 1923, at the residence of his son, Dr. Edward B. Simonds, at Riverdale, Md. He was ninety-three years old. He held the position of medical examiner at the pension bureau for twelve years, resigning in 1904 because of advanced age.

Dr. Simonds was born June 18, 1826, in Pawlet, Vt. He graduated in medicine in 1847 at the Albany Medical College, New York, and moved to Iowa to practice his profession. He named the city of Iowa Falls, Hardin county, and helped in the planning of it. He was the only physician in the radius of one hundred miles, and in the early fifties, when the frontier settlements were swept by small-pox, he attained great success in treating the disease and stamping out the plague by original methods.

His skill in handling the plague was brought to the attention of the medical profession throughout the country, and later, during the civil war, when the disease broke out in Memphis, Tennessee, he was called into military service as a surgeon and was placed in charge of the situation in that city. He met with success there also, and after the war, in which he continued to serve as operating surgeon, he was made sanitary officer of Memphis,

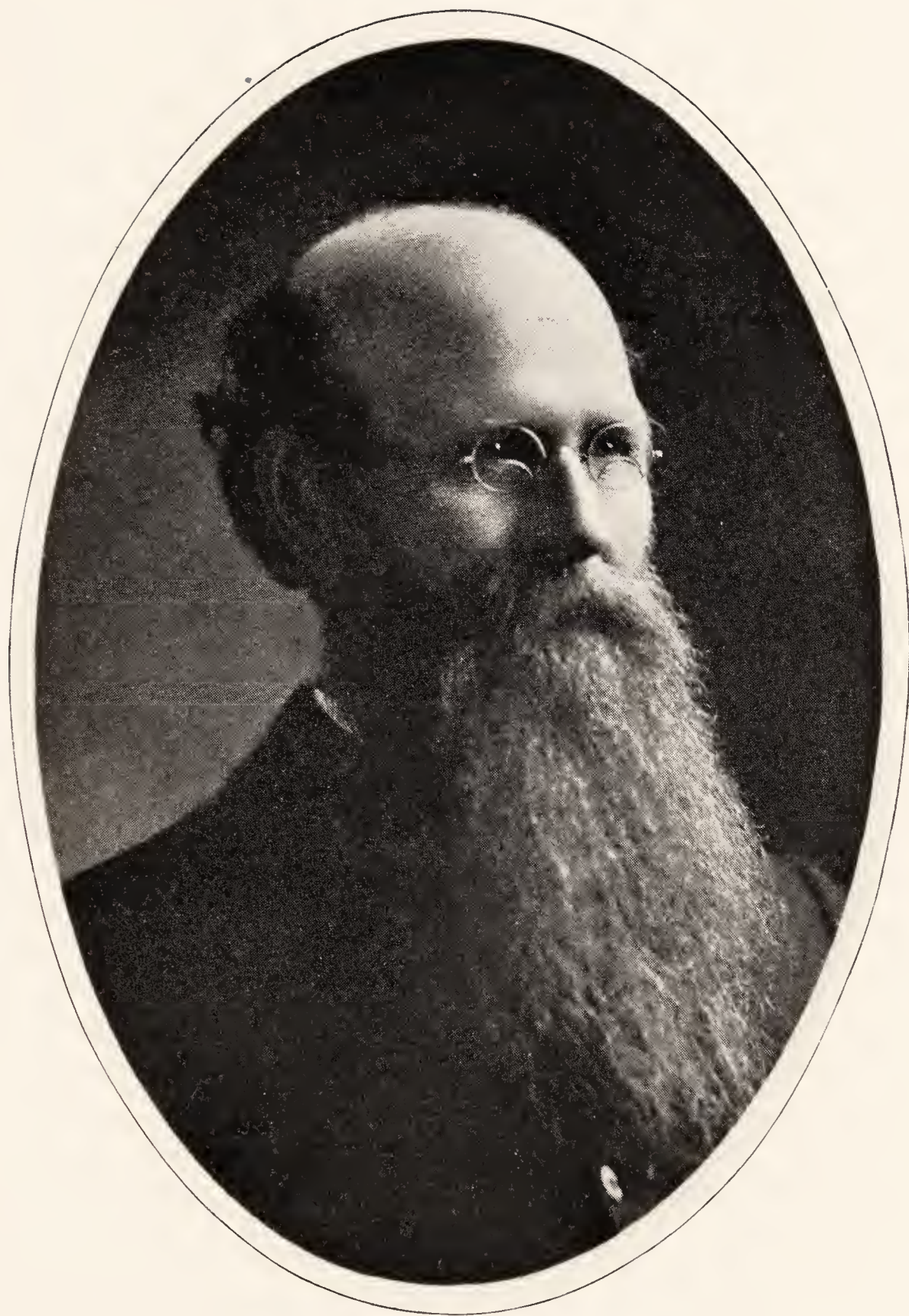
in which capacity he completed the cleaning up of the city.

He later returned to Iowa, somewhat broken in health, and finding the climate too severe for him, he moved to Fayetteville, Arkansas. Coming to Washington in 1892, he entered the service of the pension bureau, and following his retirement, he has lived with his son in Riverdale, retaining his interest in the advancement of medical science and surgery up to the time of his death.

DR. HUGH LIVINGSTON

Dr. Hugh Livingston of Hopkinton, Iowa, died at his home March 10, 1923. He was born at the old homestead near Hopkinton, October 5, 1846. Dr. Livingston's parents were born in Scotland and were members of the famous Selkirk Settlement in Canada. In 1835 the Livingstons moved south as far as Ft. Snelling, where the father engaged in building boats. Later, members of the Settlement, including the Livingston family, came down the Mississippi in boats to Dubuque. In 1837 the Livingstons took up a claim and were the first family to locate in Delaware county. The claim remains a part of the large farm holdings of the doctor, who was the last of the pioneers among them.

Dr. Livingston attended Knox College and later he was employed for a few years in the quartermaster's department in the building of the Union Pacific Railroad through the mountain states. Returning to Hopkinton on the completion of the railroad, he engaged in the drug business. In 1890 Dr. Livingston graduated from Rush Medical College and returned to Hopkinton,



DR. HUGH LIVINGSTON

where he practiced medicine to the time of his death. On December 10 he married Miss Hattie Steward. Two children, Huberta and Harriet, who, with his wife, survive him.

Dr. Livingston was a member of Delaware county, Iowa State Medical Society and the American Medical Association, the Austin Flint-Cedar Valley and the Tri-State Medical Societies.

Dr. Livingston was one of the men of the medical profession who became identified with the early history of Iowa, and devoted his energies to the building of the state, developing its resources and to public affairs which has created the wealth and comfort of the generation.

DR. EDWARD HAMLIN HAZEN

Among the men who contributed to the advancement of medicine in Iowa was Dr. Edward Hamlin Hazen, whose biography Dr. Lewis Schooler has traced carefully and which we publish in this connection. It will be seen that Dr. Hazen was no ordinary man, but rather one who had a high ideal of duty and service and who felt impelled to prepare himself with unusual care in his profession. In Dr. Hazen's day the careful and thorough fitting of himself for his specialty involved much labor, expense and sacrifice. Specialists in medicine outside of large cities were rare, and even in our large centers of population but poorly organized. As noted by Dr. Schooler, Dr. Hazen availed himself of all that could be secured in America and in 1872 studied in London and Paris. Quite different now, when those desiring special training in ophthalmology, otology and rhino-laryngology

have only to choose one of the many centers of study.

Dr. Hazen's sense of patriotism and willingness to serve his country is shown by his enlistment in the first three years' regiments that went out from Michigan during the Civil War and was assigned to the Second Michigan Volunteers and was in the battle of Bull Run. At the end of one year, was honorably discharged and entered the Regular Army and served as hospital steward for three years in the General Hospital at Alexandria, under U. S. Surgeons Porter, Summers and Page, and was discharged on the 23rd of June, 1865.

In 1867 Dr. Hazen became a member of the Iowa State Medical Society. The writer first met him in at the Marshalltown session of the Society in 1873, when he read a paper on "Optical Defects and Their Correction," illustrated by diagrams. Paper discussed by Drs. Field, Hughes and Angear.

The friendship commenced at that time continued until Dr. Hazen moved to Oakland, California, in 1913 in search of a more agreeable climate. After moving to Oakland Dr. Hazen contributed two papers on his specialty to the Journal of the Iowa State Medical Society.

Through the courtesy of Mrs. Hazen we are able to present a photograph of the doctor, which represents him in his best days, and shows a man who never grew old mentally or physically.



DR. EDWARD HAMLIN HAZEN

DR. EDWARD HAMLIN HAZEN

(Lewis Schooler, M.D., Des Moines)

Dr. Edward Hamlin Hazen, ophthalmologist and otologist, whose professional training was received under men eminent in this specialty, while his own professional service won him high rank in practice, was born April 12, 1834, at Elyria, Ohio, his parents being Edward and Minerva C. (Hamlin) Hazen. The grandfather, Benjamin Hazen, was a Revolutionary soldier who participated in the battle of Bennington. He married Elizabeth Gates. The ancestry of both the Hazen and Hamlin families can be traced back to 1635, Dr. Hazen being of the seventh generation in America. His father was well known as an author of school books and also of a volume entitled *Technology of Profession and Trades* (Harper Library). He died April 24, 1877, in his eightieth year, and his wife passed away April 10, 1895, in her eighty-ninth year.

Dr. Hazen spent his youthful days in the East and there attended the common schools. Subsequently he engaged in clerking in a general mercantile store in Ohio and also followed farming in that state. In the winter of 1856-57 he taught school in Winneshiek county, Iowa. In 1858 and 1859 he was a student at Oberlin College, Oberlin, Ohio, preparatory to the study of medicine. In the fall 1860 he entered the medical department of Michigan University, there continuing his studies until he joined Company K of the Second Michigan Infantry. He enlisted as the regiment was leaving Detroit for Washington, D. C. and participated in the battles of Bull Run on the 18th and 21st of July, 1861. At the end of a

year he was discharged from the volunteer service and enlisted as hospital steward in the United States Army, serving in that capacity in the General Hospital at Alexandria, Virginia, for three years. After the war, in 1865-66, Dr. Hazen matriculated in what is now the Western Reserve Medical College and graduated in 1866. For a year in 1866-67, he engaged in the general practice of medicine in Buffalo, New York, and on the 8th of April of the latter year removed to Davenport, Iowa. In 1869 he went to New York and spent four successive winters in the clinics under Professors Agnew, Roosa, Pomeroy, Knapp, Lefferts and other eminent specialists in the disease of the eye and ear, and also took optical instructions of Doctors Noyes and Pulley, afterward returning to Davenport, where he practiced until 1891. At that time he came to Des Moines and has since been a representative of the profession in this city, specializing throughout the entire period in the treatment of diseases of the eye, ear, nose and throat, in which connection his superior ability was widely recognized. For four years, from 1870 until 1874, he was lecturer on the eye and ear at the University of Iowa and was professor of ophthalmology and otology in the medical department of Drake University (College of Physicians and Surgeons) for sixteen years, ending in 1900.

Establishing the Eye and Ear Infirmary of Davenport, Iowa, he advertised it by placing a cut of the building in the paper without encomiums, and this, being pronounced non-professional he was turned out of the University. On its organization he was invited by Dr. Blanchard to join the fac-

ulty of the College of Physicians and Surgeons at Des Moines. His contributions to the profession aside from private practice established his position as one of its valuable members. As an author he became well known as the writer of a small book called *New Findings in Ophthalmology and Otology*, which was published in an enlarged second edition in 1911. He was the inventor of a system for treating the eye muscles in eye strain and invented the *Kratometer* in this connection. Not being able to get opticians to manufacture this instrument, he and his son undertook the work of manufacture and have sold one hundred and fifty in this country and abroad. He was a regular member in good standing of the American Medical Association, The Iowa State Medical Society and The Polk County Medical Society. At the time he resigned his professorship in the Drake University in 1900 he was made emeritus professor of ophthalmology.

Dr. Hazen was united in marriage in 1874 to Miss Sally Feeman of Lancaster, Ohio, one of the two daughters of Mrs. Elizabeth Feeman, a widow. Their living children are: Edward B., who is married and lives at Bridal Veil, Oregon; Roy Alfred of San Francisco, California; Arthur Waldo, who wedded Miss Edythe Appleby of Denver, Colorado and now makes his home in Omaha, Nebraska; Benjamin Hamlin of Bridal Veil, Oregon, and Laura, the wife of W. E. Pitcher of Berkely, California.

Dr. Hazen was never an office seeker or holder, but before the Civil War became a stalwart advocate of republican principles, which he has continued to support to the time of his death.

He was a member of August Wentz Post, No. 1, G. A. R., of which he became commander and for two years he was medical director in the state encampment. Fraternally he was a thirty-second degree Mason, United States Jurisdiction, Registrar of the Sons of the American Revolution (state). He joined the Iowa Sons of the Revolution on its organization in Davenport. When twelve years of age he became a member of the Methodist Episcopal Church of New York City and for twelve years he was non-affiliated. During the succeeding period of twelve years he was a Congregationalist and for a similar period was a member of the Unitarian church. He was a man of broad and liberal views, not only upon religious but upon all questions, and his position upon any vital question was always taken from a progressive standpoint.

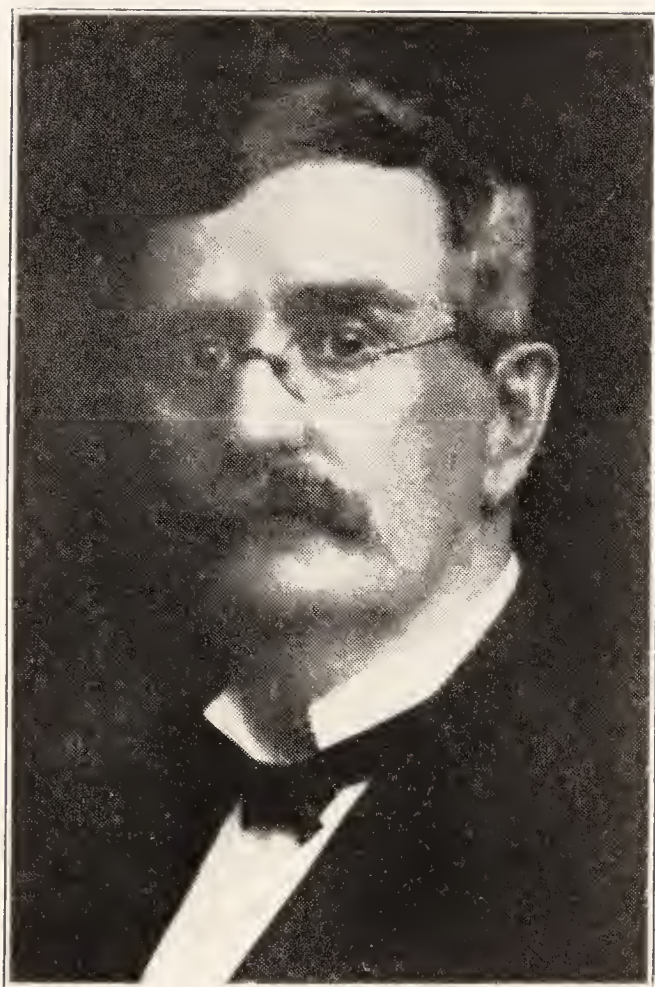
DR. AMOS BABCOCK

(N. Schilling, M.D., New Hampton)

Dr. Amos Babcock was born at Kirtland, Ohio, January 21, 1845, and died suddenly of acute cardiac dilatation at New Hampton, Iowa, August 23, 1923. In 1852, he with his parents moved to Wisconsin, and in 1858, they came to Iowa, locating on a farm near Fairbank, where he resided until the beginning of the Civil War.

In 1862, at the age of seventeen years, he responded to his country's call to arms in defense of the Union, and served with distinction until the close of the war, receiving an honorable discharge.

Immediately after the close of the war, he began the study of medicine in the office of Doctor Robinson, at West Union, Iowa, and later at-



DR. AMOS BABCOCK



tended and was graduated from Rush Medical College of Chicago.

He began the practice of medicine in New Hampton in 1869, and was in the continuous and active practice of his profession until about ten years ago when he retired on account of ill health.

He was married to Emma Adams at New Hampton in 1870, and together they braved the hardships of early pioneer life. To this union were born two sons. He is survived by his devoted wife, Emma Babcock and a son, Commander J. V. Babcock, who served with distinction in the late World War, and who is now stationed at Honolulu as Chief of Naval operations. His son Herbert died in early youth.

The deceased was an active member of the Methodist Episcopal Church, of the Masonic bodies and of A. P. Morton Post of the Grand Army of the Republic. He was also at one time a member of the Board of Visitors of the Naval Academy at Annapolis.

Dr. Babcock was an exceptional character. Coming to New Hampton in pioneer days, he saw and felt the hardships incident to early settlement in a new and undeveloped country. He was ever ready to answer the call of the sick and needy regardless of whether it came from the poverty stricken hovel or the pretentious home. In his professional life he knew no call but duty, and much of his time and talent was given to charity patients. He was successful in his profession, as in every undertaking.

Doctor Babcock saw the virgin prairies surrounding New Hampton gradually transformed

into productive fields and blossoming gardens. He watched the hamlet of New Hampton grow and develop into a beautiful and thriving little city. He took an active part in the civic life of the community and the affairs of state and did his full share in their development. He was a student of history and of men and had a wonderful faculty of retaining in detail the impression which he received from his studies, observations and travels. He was devoted to his family, was possessed of a broad charity and an unswerving integrity. He was distinctly sympathetic in his attitude toward his fellowmen, had the faculty of making friends, and the friendships which he formed were enduring.

In his passing, New Hampton loses one of its good, loyal supporters and public-spirited men, one whose life has been interwoven and identified with the affairs and life of the community for over fifty years.

He leaves as a heritage to comfort his bereaved family, the memory of a life well spent, an honorable career and a good name. What greater tribute could be paid his memory than to say ; he was true to his trust, his friends, his family, his country and his God.

INSANE HOSPITALS

A history of medicine in Iowa would not be complete without a reference to our public institutions for the care of the mentally afflicted. While mental disease constitutes a specialty of itself, it has so wide a relation to the general practice of medicine that it cannot be omitted from general consideration.

The practice of medicine as we have thus far considered it has been as a private business, developing in a new country in a way and under circumstances so different from our present conception of medicine, that we are liable to think of the days before the development of the "Germ Theory of Disease," as belonging to a past age and to disassociate it with the present. Fortunately such views are held largely by those who make the practice of medicine a trade. The men whom we delight to look upon as men of broad and liberal views, clearly understand that so difficult and complex a subject as medicine requires a long period of evolution and could only develop with the advancement of science. The private or general practitioner utilized so far as possible the revelations of science in his daily work, but the fullest realization of the discoveries of science needed the cooperation of institutions of learning and the institutional care of patients where scientific methods of treatment could be employed in a manner not possible for the private physician. We have endeavored to point out the contributions of men obliged to depend largely on their own resources.

The physicians connected with the hospitals for the insane, were in a position to utilize the resources placed in their hands by the state and could remain stationary or extend their opportunities according to the industry, skill and ability of the responsible medical officers.

The early history of insane hospitals and the treatment accorded their inmates was tragic indeed, but fortunately for us, this period had passed before our institutions were organized, but we were not free from the tradition that insane hospitals were for the care of the insane and only incidentally for treatment.

Dr. Gershom H. Hill has kindly agreed to write of the evolution of psychiatry in the United States, with biographical sketches of the superintendents of Iowa insane hospitals and their work.

PSYCHIATRISTS OF IOWA

GERSHOM H. HILL, Des Moines

Beginning with Dr. Patterson, the first superintendent of the State Hospital at Mount Pleasant, and ending with Dr. Lowrey, assistant director of the new psychopathic hospital at Iowa City, Iowa, a biographical sketch will be furnished to the readers of the Journal of twenty men, who in the past were known as alienists.

INTRODUCTORY STATEMENTS

The task of preparing the histories of these fellow practitioners is undertaken because the writer has had the privilege of a personal acquaintance with each and every one of them, also has a distinct knowledge of the services rendered by them to the state of Iowa.

"The Association of Medical Superintendents of American Institutions for the Insane" began with thirteen members, in 1844, in Philadelphia. It met annually in different states where there were institutions for the insane. In 1893 the name was changed to "The American Psychological Association" and in 1920 to "The American Psychiatric Association." The first meeting was held at Jones Hotel in Philadelphia. On this occasion there were present: Dr. Samuel B. Woodward of Worcester State Hospital, Massachusetts; Dr. Isaac Ray of the Maine State Hospital for the Insane, Augusta, Maine; Dr. Luther V. Bell of the McLean Asylum at Somerville, Massachusetts; Dr. Charles H. Stedman of the Boston Lunatic Asylum; Dr. John B. Butler of the Hartford Retreat, Connecticut; Dr. Amariah Brigham of the State Lunatic Asylum at Utica, New York.

With these charter members this organization has grown, by having in it not only the heads of the state and private institutions for the insane, but also many of their experienced assistants, besides psychiatrists and neurologists engaged in private practice, so that the total membership at present is nearly one thousand.

A knowledge of mental diseases, especially the causes of them, has, like civilization itself, been an evolutionary process. Thousands of years ago the heathen believed that diseases came from an unknown world, often directly from God. The Christianity of the New Testament does not materially modify the belief in demonology.

In the reign of Edward II it was enacted that "the King shall have the custody of the lands of natural fools, taking the property of them without

waste or destruction, and shall find them their necessities, of whosoever the lands are holden; and after the death of such idiots, he shall render the same to the right heirs, so that such idiots shall not be alien, nor their heirs be disinherited." The Vagrant Act, however, passed in the year 1744, may be regarded as containing the earliest provision made in England for the safe custody of lunatics. Two justices were by it authorized to secure any furious or dangerous lunatic, and to order that such be locked up, and if necessary, be chained. Whatever property he possessed was employed in his maintenance, and his place of settlement determined.

So far back as the year 1763, a committee of the House of Commons investigated the condition of houses in which the insane were confined, and discovered, as might be expected, their fearfully neglected condition. In the following year a bill was introduced for the regulation of private asylums and "mad houses."

In the early history of this country demented persons who could not care for themselves, nor be controlled by relatives, were restrained at first in improvised places in company with paupers and criminals.

The earliest legal recognition of the insane is the adoption of an act in 1751, in South Carolina, which provides for the subsistence of slaves who may become lunatics, while belonging to owners too poor to care for them.

The Eastern Lunatic Asylum at Williamsburg, Virginia, is the oldest state hospital in the United States. It was established in 1774.

The history of insanity has its pioneers in this country and elsewhere, its heroes and heroines;

but from the standpoint of personal labors to promote practical reforms in public provision for the insane, the work of Dorothea Dix stands pre-eminent. In the forty years of her public work she was instrumental in founding and enlarging more than thirty state institutions for the custody and right treatment of the insane, becoming an acknowledged power in this respect, not only throughout the United States, but in European countries as well. Miss Dix was born in Maine in 1802, gained an enviable reputation in charge of "Dix Mansion and Boarding School" in Boston. When thirty-nine years of age she became interested in prisons and prison reform, and entered upon her career as a world wide practical philanthropist. In 1854, Miss Dix spent seven months visiting in Great Britain, Paris, Rome, Constantinople, Hungary, Austria, Russia, Sweden, Denmark, Holland and Belgium. She was cordially received and questioned everywhere. Although her strength had been severely taxed, she lived to be eighty-five years old. During the declining years of her life she was physically incapacitated, but her mind was unimpaired. During the last five years, from choice, she made her permanent home in the state hospital at Trenton, New Jersey, where she was well cared for, and frequently visited by notable friends from far and near.

Florence Nightingale was born in Italy in 1823, had wealthy English parents, and early devoted herself to nursing the sick, and was permitted to enter the Crimean War and first distinguished herself in the relief of suffering among the soldiers in Constantinople. She is the patron saint of all educated nurses, and died a few years after the hospital at Mount Pleasant was opened. Thus

the way was paved to establish training schools for nurses in the state hospitals and other establishments where insane persons are cared for.

After the Civil War came a period of prosperity in Iowa, also in the states and territories west of the Mississippi River. Railroads were extended and new ones constructed; the population of the west rapidly increased. It is observed, however, that most of the pioneers were young, single or married, and in making homes for themselves in Iowa, left their demented relatives to be cared for in eastern institutions, so that the proportion of insane in Iowa was less than in the older states, and in states containing large cities. But now the population of Iowa is not increasing very much, and the statistics show that a large proportion of the patients in the four state hospitals are natives of Iowa.

R. J. PATTERSON, M.D.

The Hospital for the Insane at Mount Pleasant, Iowa, was finished and ready for occupancy the first of March, 1861. In the organization of the hospital the trustees felt that there was not a more responsible duty devolving upon them than the selection of the resident officers, especially of the superintendent, for upon the capacity of this officer must chiefly depend the success of the institution in accomplishing the design of its creation and its claim to the public confidence. Happily Iowa from its wealth and resources, from its increasing population, and from its high prospects of future prosperity, enjoys so high a reputation abroad, that many of the most distinguished and experienced physicians of the country were ready to accept this most difficult post. The

trustees believed that the field of choice should not be circumscribed.

From the many eminent physicians who were recommended to them, they selected Dr. R. J. Patterson of Ohio. Dr. Patterson had had ample experience in the department of medical practice to which he was called. He had been for several years assistant physician in the State Lunatic Hospital of Ohio; afterward, for several years, superintendent of the Hospital for the Insane of the State of Indiana; and at the time of his appointment to this situation, superintendent of the Asylum for Idiots and Imbecile Youths of the State of Ohio.

In accordance with the provision of law, the trustees fixed the price of board and the care of patients at two dollars and fifty cents per week. They were not able to determine the actual cost of board per week for each patient, but they were confident that it would not exceed the sum established, and they hoped it would be less.

In the first printed report made December 1, 1861, we find the superintendent's opinion concerning the causes of insanity. "The popular tendency to refer every case of insanity to some particular cause, springs from the very superficial knowledge of the disease. Seldom, in fact, is it produced by any single incident or event. It requires a combination of adverse influences, each of which contributed to the result, though we may be quite incompetent to determine precisely the share which they respectively take. In using the term, "cause of insanity," we mean to designate, not some particular incident having in itself the power of producing the disease, but rather one holding a prominent place in any com-

bination of incidents more or less directly followed by insanity."

Concerning treatment, the doctor explains to the trustees that there are no specifics in the treatment of insanity, but the same general principles must guide us here, that should guide us in the treatment of other diseases. Harsh means, either medical or moral, are in no way suited to the insane, but on the contrary, mild treatment only is allowable.

By the direction of the trustees, the superintendent framed by-laws, setting forth the duties and restrictions for attendants and other employes making a total of eighty-three sections.

In the printed report of December 1, 1865, the trustees have to report a serious cause of regret in the retirement of Dr. Patterson from the office of superintendent.

Immediately after leaving Mount Pleasant he moved to Batavia, Illinois, where he remained the remainder of his life. In 1867 he established the Bellevue Place Sanatorium, with thirty-six beds, for nervous and mental diseases, which is still in operation. Among the notable patients treated by Dr. Patterson was the widow of Abraham Lincoln. He was frequently consulted by the physicians of Chicago, and did some work in the courts. He wrote but little in connection with his specialty, outside of lectures which he delivered at the Chicago Medical College, but was wholly absorbed in the work of teaching and practicing. The clause in the Illinois law for the commitment of the insane, which provides for the appointment of the medical commission by a judge of the court, in lieu of a jury trial, was entirely owing to his strenuous efforts.

He was a large man, five feet and ten inches high, and of heavy build. His hair brown; his eyes hazel; his manner very quick. He was a good and ready talker, but seldom told stories. A little anecdote of his childhood, however, he was fond of narrating. One Sunday morning he ran away from church and caught a fine string of trout. Not daring to bring them home on that day, he hid them. Monday the time still looked suspiciously close to Sunday, so he waited still longer. Tuesday he decided it would be all right to bring them home. Alas! the fish were spoiled. This very deplorable fact led to inquiry and detection. His parents dealt with him after the manner of the real New Englander of that time, and, as the doctor himself was wont to say, in all the affairs of his subsequent life he was inclined to give particular attention to "prognosis."

He was exceedingly fond of driving fast horses. "I take my exercise," said he, "vicariously." He made friends quickly and was fond of children, but very seldom played with them. He married Lucy Clark of Cincinnati, Ohio, in 1848. He died of pneumonia in Batavia, Illinois, April 27, 1893.

DR. MARK RANEY

Dr. Mark Raney was born in Westminister, Vermont, July 7, 1827, and died at the Insane Hospital at Mt. Pleasant February 1, 1882 of pneumonia.

Dr. Raney had received the advantages of a college training, studied medicine with Dr. Campbell of Westminister and in 1849 graduated from the Vermont Medical College. Soon after graduation Dr. Raney was appointed assistant physi-

cian to the Butler Hospital at Providence, R. I., under the superintendency of the distinguished alienist Dr. Ray. After five years service, in 1854 was appointed to a more desirable position in the McLean Hospital near Boston, under Dr. Luther V. Bell.

On the resignation of Dr. Patterson as superintendent of the Mt. Pleasant Hospital in 1864, Dr. Raney was appointed to fill the place.

Dr. Raney's scholarly attainments and thorough training under the hands of masters in hospital work well fitted him for a field of great usefulness in directing the Iowa institution. In 1871 he was appointed lecturer on insanity at the medical department of the Iowa University at Iowa City, which position he held at the time of his death. It was the exposure incident to going to Iowa City to lecture, on his way to attend a meeting of the Iowa State Medical Society at Des Moines, that he contracted pneumonia.

INSANE HOSPITAL AT INDEPENDENCE

By Gershom H. Hill, A.M., M.D.

The second hospital for the insane was provided for by the Twelfth General Assembly. Hon. W. G. Donnen, then senator from Buchanan county, was active and succeeded in having it "located on suitable ground within two miles of Independence." Hon. Geo. W. Bemis was a suitable citizen of Independence to become the local member of the building commission. The other two capable men were Marturin L. Fisher and Erastus G. Morgan, president of a bank in Fort Dodge. They met in June, 1868. Colonel S. P. Shipman of Madison, Wisconsin, was employed

to prepare plans, which after being examined and modified by Dr. Ranney, were adopted. As appropriations made by the twelfth and following assemblies became available, the institution was erected and occupied piece-meal. The central portion, occupied by the officers, and directly in the rear the kitchen, laundry and heating plant were at the same time as the north wing of the institution finished and occupied as soon as possible. This institution fronting toward the east and the Rock Island railroad track, known as the main building, was not completed and occupied for many years. Afterward cottages were added, not only to be occupied by patients, but store houses and shops of various kinds have been built, until the hospital at Independence is quite like the other three hospitals in its ability to classify patients and to treat and cure them in a most up-to-date manner.

DR. ALBERT REYNOLDS

By Gershom H. Hill, A.M., M.D.

Dr. Albert Reynolds was born at Grand Island, Vermont, in 1837, and died in Clinton, Iowa, February 23, 1899. His education in letters and in medicine was acquired in his native state. He served two years as a volunteer in the Civil War. While Dr. Edwin R. Chapin was superintendent, and Dr. Carlos F. MacDonald an assistant physician, he was a member of the staff of the Kings County Lunatic Asylum at Flatbush, New York.

He located in Clinton, Iowa, in 1867, and there married Miss Sarah Rogers, a teacher and a member of a prominent family of the State of New York.

In 1873 he became superintendent of and opened the state hospital for the insane at Independence.

After a faithful and successful service, he retired from office in 1881 on account of failing health and resumed private practice in Clinton. He continued in the active practice of his profession until a few weeks before his death. He lectured upon insanity in the medical department of the State University of Iowa for several years.

Dr. Reynolds was well prepared and qualified to stand at the head of this new and excellent institution. He was good sized, good looking, and a good example for his associates. Even more, he was naturally and always a gentleman. He had self-respect and was patiently respectful to everybody. He was the personification of good common sense. He was always busy in his office, in the wards, and, on occasion, on the streets engaged in various affairs. He chose to spend his evenings in the study of scientific subjects or taking turns with his wife in reading aloud books of art, biography, fiction or history. Dr. Reynolds was devoted to his two sons; one of whom became a lawyer and the younger a physician who is now a psychiatrist in charge of a government hospital in Boston, Massachusetts.

The subject of this sketch was never active in politics. Men in the hospital and in the City of Independence hardly knew that Dr. Reynolds generally in county, state and national affairs voted the democratic ticket.

Early in life he chose to attend the Episcopal church, but after marriage he enjoyed attending and supporting the Presbyterian church in company with his admirable wife.



DR. ALBERT REYNOLDS

GERSHOM HYDE HILL, A.M., M.D.

By D. S. Fairchild, M.D.

Dr. G. H. Hill was born at Garnavillo, Clayton county, Iowa, May 8, 1846, the son of James Jeremiah Hill, who came to Iowa in 1844 and settled in Garnavillo. James J. Hill was born in Phippsburg, Maine, in 1815; prepared for college at Bridgeton Academy and graduated from Bowdoin College in the class of 1838. He prepared for the ministry at Andover Theological Seminary in 1843. In the spring of 1844 he married Miss Sarah Elizabeth Hyde, the daughter of a deacon of the Old South Church, Bath, Me. Their wedding trip was a journey down the Ohio river to St. Louis, up the Mississippi river to Dubuque by steamboat, and across the country to the village of Garnavillo, where Dr. Hill was born in 1846. In 1849 the Rev. James J. Hill moved to Albany, Illinois, where Mrs. Hill died May 27, 1853. In September, 1854, Rev. James J. Hill married Sarah Wells Harriman of Great Falls, New Hampshire.

Rev. Hill began his ministerial duties at Garnavillo and continued preaching in several places until 1860, when he moved to Grinnell for its educational advantages. His two older sons, Gershom and James graduated in the class of 1871, receiving A.B. degrees. Rev. Hill continued active church duties until the time of his death, October 29, 1870.

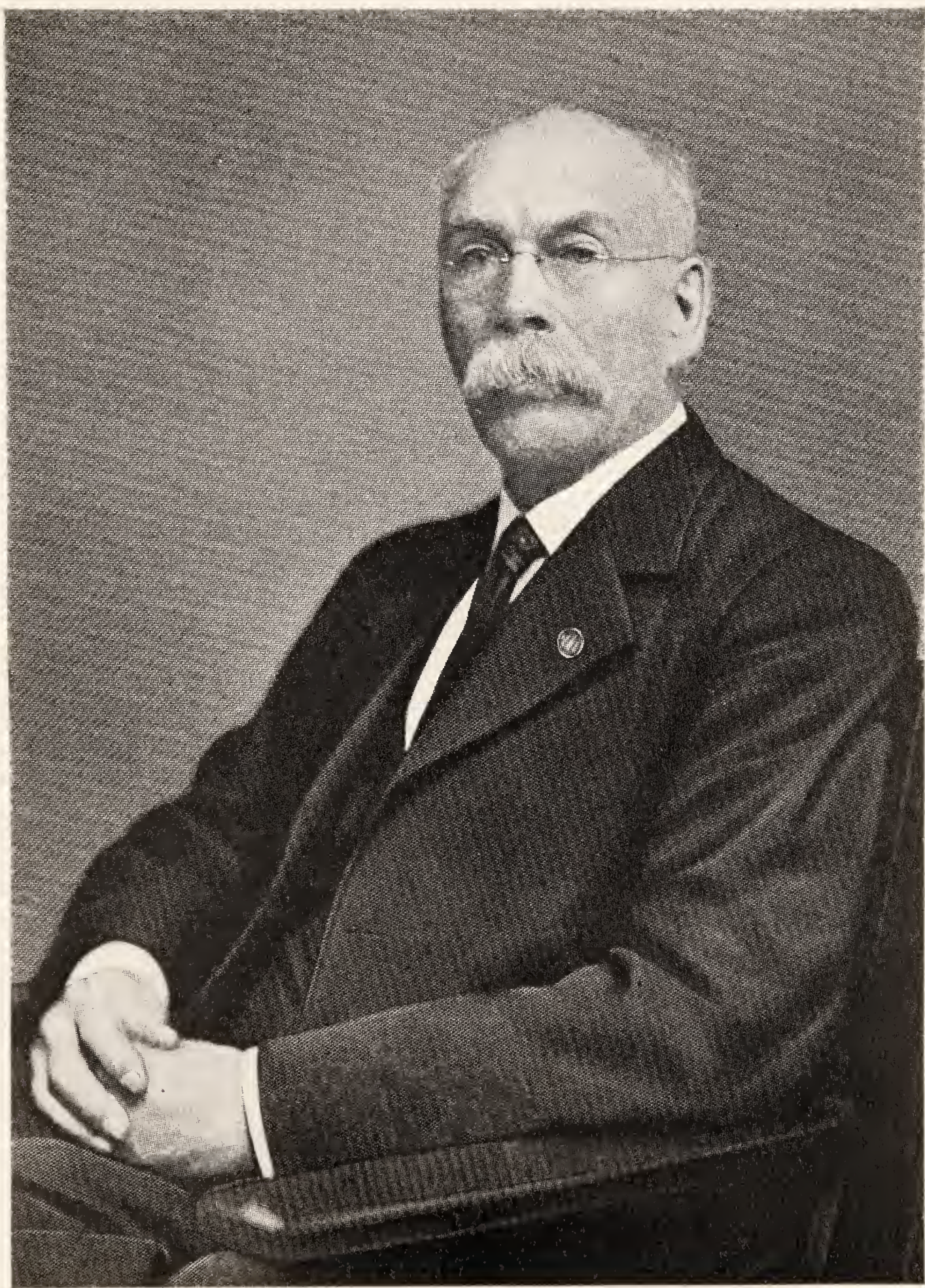
The founder of the Hill branch was Peter Hill, who came from the west of England in 1653. Four generations later brings us to Judge Mark Langdon Hill, the grandfather of Dr. G. H. Hill, the subject of this history. On his mother's side Dr. Hill descended from Major Elijah Hyde, who

commanded a regiment of Light Horse which did active service during the Revolutionary War.

We have thus briefly outlined a history of Dr. Hill's immediate ancestry in the belief that a vigorous, upright and independent line of inheritance has an immense influence in determining the character of a long line of descendents.

Dr. Hill's younger brother, Rev. James Langdon Hill, became a distinguished minister of the Congregational Church in Salem, Massachusetts. It was the privilege of the writer to visit the Rev. James L. Hill at his home in Salem in company with Dr. G. H. Hill. We were then deeply impressed with the thought just expressed, of the great influence wrought on the character of New England by the immigration of God-fearing men and women from Old England, who came to a new world to worship after their own conscience and to build new communities. They were a stalwart race.

Dr. Hill, as already stated, received his A.B. degree from Iowa College (Grinnell College) in 1871 and ten years later the A.M. degree. In 1874 he obtained his degree of Doctor of Medicine from Rush Medical College, Chicago. In 1878 he pursued a graduate course at Bellevue Hospital Medical College, New York, and in 1890 at Harvard Medical School, Boston. On completion of his literary and medical courses, Dr. Hill began the practice of his profession at Moline, Illinois, until December 1, 1874, when he was elected assistant superintendent of the State Hospital for the Insane at Independence. After seven years service as assistant superintendent, on November 1, 1881, he was elected superintendent, which position he held until 1902, when he re-



GERSHOM H. HILL, M.D.

Born May 8, 1846

Died November 23, 1925

signed and engaged in private practice in Des Moines, as alienist.

In 1905, associated with Dr. J. C. Doolittle, he opened a private hospital for the treatment of nervous and mental invalids. Dr. Hill was fortunate in securing a beautiful old homestead in the residential part of Des Moines, formerly owned by Mr. Callanan, comprising forty acres of woodland and park. In addition to the large and beautiful house erected by Mr. Callanan, suitable buildings have been erected for a large number of patients. The institution is now known as "The Retreat." For nearly twenty years this institution has been conducted with marked success. Dr. J. C. Doolittle has been succeeded by Dr. Russell Doolittle.

Dr. Hill has been active in medical society work. For many years he was president of the Buchanan County Medical Society, he was also an early member of Austin Flint-Cedar Valley Medical Society and at one time its president. He is a member of the Polk County Medical Society, a member of the Iowa State Medical Society since 1877, a Fellow of the American Medical Association. In addition to the above named societies, he is a member of numerous special societies, the Des Moines Pathological Society, the American Academy of Medicine, American Medico-Psychological Association and the Congress of American Physicians and Surgeons. Dr. Hill is also a member of the Methodist Hospital staff.

On January 9, 1879, Dr. Hill married Louisa Bliss Ford at Lynn, Massachusetts. Their only child, Julia Ford Hill, was born at Independence in 1886. She graduated from Grinnell College

1908 and from the Medical School of Drake University 1913.

Dr. Hill for sixteen years was lecturer on mental diseases at the Iowa State University, and for ten years professor of mental diseases in the College of Medicine, Drake University.

Since graduating in medicine, Dr. Julia Ford Hill has engaged in laboratory work and post-graduate work, the last of which was under the direct supervision of Dr. Barrett in the Psychopathic Hospital at Ann Arbor, Michigan. She is now a member of the medical staff of "The Retreat," devoting herself to Occupational Therapy, where she directs the manual training or work done by patients in shop department.

By Gershom H. Hill, A.M., M.D

The Insane Hospital at Independence was opened in 1873 with Dr. Albert Reynolds superintendent and Dr. Gershom Hill assistant superintendent in 1874. In 1881 Dr. Reynolds resigned and was succeeded by Dr. Hill, who served until 1902. In 1895 a laboratory service was organized under the direction of Dr. Albert M. Barrett. In 1898 the work of the institution was reorganized, with laboratory investigation as an important factor in administration and treatment.

From the period of reorganization, the Independence Hospital, in common with other institutions of a similar character, assumed the functions of a real hospital for the care and treatment of the mentally afflicted.

CLARINDA HOSPITAL FOR THE INSANE

By Gershom H. Hill, A.M., M.D.

The Twentieth General Assembly enacted a law to make further provision for the care of insane persons. The governor, with the consent of the executive council, to appoint three suitable persons, who shall constitute a board of commissioners for the purpose of selecting the location and site, adopting plans and erecting an additional hospital for the insane of the state. The location shall be in the southwestern portion of the state and shall be selected with reference to its healthfulness and accessibility. The site shall consist of not less than three hundred and twenty acres of land and shall be selected so as to secure an abundant supply of good water and an opportunity for the proper and efficient drainage and no gratuity or donation shall be received as an inducement to such location.

That said board of commissioners shall procure and adopt the plan known as the cottage plans, and all buildings so erected shall be substantially fire-proof. The exterior of the buildings shall be plain and of brick. That there is hereby appropriated one hundred and fifty thousand dollars provided that not more than one-half of the amount shall be expended in the year 1884. When such buildings or any of them shall be completed, and ready for use, the commissioners shall notify the governor of the state and he shall at once take steps to organize the same by the appointment of a board of five trustees who shall hold their office until the next session of the legislature and whose qualifications and duties shall be the same as now provided by law

for the trustees of the others of the state of Iowa, and the laws of the state governing the other hospitals and thus admission of patients thereto, so far as applicable, shall apply to and govern the hospitals herein provided for.

On the sixteenth day of July, 1884, the commissioners met again at Des Moines for the purpose of deciding upon the site of the new hospital. They had already visited and carefully inspected every site that was being offered as a location. After deliberation these gentlemen, by a majority vote, selected Clarinda as the place combining in the fullest degree the requirements of the statute under which they acted. The board also elected P. W. Lewellen, M.D., of Clarinda, as the first superintendent, who selected Dr. J. M. Aiken, assistant physician, M. T. Butterfield, steward, and Mrs. Alice W. Lewellen, matron.

DR. P. W. LEWELLEN

P. W. Lewellen was born in Indiana in 1840 and died at Brookfield, Missouri, March 20, 1905, and buried at Clarinda March 22.

Dr. Lewellen was graduated in medicine from the Medical College of Ohio, Cincinnati, March, 1865, and practiced medicine in Iowa twenty-one years.

Dr. Lewellen at the time of his death was about sixty-five years old. He came to Clarinda in May, 1865, to practice medicine, and was married to Miss Alice Weidner within a short time after coming to Clarinda. The deceased was a man of extraordinary attainments. As a physician he was considered of great skill and his practice was enormous.

His fine education and lovable disposition were early recognized by his neighbors, as well as by the state. For many years he was a trustee of the insane hospitals at Mount Pleasant and Independence. He represented this senatorial district in the Seventeenth and Eighteenth General Assemblies. He was largely instrumental in locating the insane hospital at Clarinda, as by his state-wide acquaintance he aided the Hon. T. E. Clark, who was his successor in the state senate, and also Hon. William Butler, the representative in the house, in furthering the chances of Clarinda for the location of the state institution of which he was the first superintendent for about six years.

Dr. Lewellen was elected the first superintendent of the Clarinda hospital which was opened December 15, 1888, and his wife was matron. He resigned his office and was succeeded by Dr. Hoyt in 1892.

The board of health was organized in 1880 and the board of medical examiners in accordance with an act of the Twenty-first General Assembly, held its first meeting on May 18, 1886 and was composed of seven physicians, namely, Dr. Robertson of Muscatine, Dr. Lewellen of Clarinda, Dr. Clark of McGregor, Dr. Reynolds of Centerville, Dr. George L. Roberts, Dr. Dickinson of Des Moines, who was the first Homeopath member and Dr. Justin M. Hull of Lake Mills, who was the eclectic member. At the temporary organization of the medical examiners, Dr. Lewellen served as chairman and Dr. Roberts as secretary. Dr. Robertson of Muscatine and Dr. Lewellen of Clarinda were appointed a special committee on by-laws and rules. At this

time according to law the seven men balloted in order to determine how long each one of them would have to serve the state in this capacity. Accordingly Dr. Lewellen's term of office was five years. At the May meeting in 1888, Dr. Lewellen was excused from attending but he continued to serve the state as a member of the board of health until 1892.

DR. FRANK CRAMPTON HOYT

Frank Crampton Hoyt was born in Denver, Colorado, November 17, 1859. He graduated in medicine at the College of Physicians and Surgeons at St. Joseph, Missouri, in 1881. Afterwards he pursued a course of study in pathology at the University of Kentucky and Louisville. He founded and edited the St. Joseph Medical Herald. He had a scholarly mind and a talent for writing, as was shown by the numerous papers which he read before medical societies and his reports as superintendent of the hospitals at Clarinda and Mount Pleasant. In September, 1887, he was appointed third assistant physician in charge of pathology at the state hospital at St. Joseph, Missouri. Here for a period of nearly six years he carried on the work of the pathological department systematically and efficiently, obtaining and carefully studying much valuable material. As a result of these studies he published subsequently papers on "Pachymeningitis Hemorrhagica", "Tropho-Neuroses in the Insane", and "The Tropho-Neuroses of Paretic Dementia".

In 1893 he was appointed medical superintendent of the state hospital at Clarinda, and his administration of this institution was most success-

ful. While in Clarinda he organized an excellent band to furnish out-of-door music in summer and an orchestra for in-door and winter evening entertainment. He also inaugurated a military drill for patients under a competent drill-master. He also carried on mechanical industries for patients, such as manufacturing clothing, shoes, brushes, brooms, furniture of all kinds, to a greater extent than any other state hospital of equal size; in addition, farm and garden operations were largely engaged in.

In September, 1898, he resigned and removed to Chicago, but was almost immediately recalled to Iowa to assume charge of the hospital for the insane at Mount Pleasant, owing to the death of Dr. H. A. Gilman. His administration at Mount Pleasant was good. He introduced many improvements, such as forced ventilation, electric lighting, new and larger kitchens, an associate dining room and an ample water supply.

He married in 1883 Miss Mattie Price Garner, of Richmond, Missouri, who, with three children, survived him.

He died suddenly in Kansas City, May 21, 1901.

PIONEER PHYSICIANS

BIOGRAPHIC SKETCH OF THE LIFE OF DR. MERRILL OTIS OF TABOR, IOWA

Dr. Otis was born in Holmes county, Ohio, May 16, 1830. When seven years of age he moved with his father's family to Henry county, Illinois, where he was educated in the common school and at Oxford Academy. At the age of nineteen he entered Rush Medical College of Chicago and read medicine under the English physician, Thomas Hall. He graduated in medicine from the St. Joseph College of Physicians and Surgeons and began the practice of medicine in Henry county, Ia., in 1852. He formed several partnerships in the practice of medicine after he moved to Tabor. The physicians with whom he was associated were Dr. R. R. Hanley, Dr. G. S. Stevens and a Dr. Rust. He began his practice in Tabor in 1866. At the commencement of the Civil War he offered his services with the volunteer corps but was not accepted because the quota had been filled. He served as a member of the county board of supervisors, a member of the state board of registration, and also later had charge of the distribution of the funds of the county. The doctor was married twice. His first wife, Margaret, died in April, 1881, at Tabor, Iowa. In 1889 he was married to Alice Connor of Bartlett, Iowa, who still lives. He acquired considerable property in the town of Tabor, and the surrounding country. He was one of the charter members of the Baptist church at Tabor. A brother, J. C. Otis, was a Baptist minister, and died at Glenwood, Iowa. Another



MERRILL OTIS, M.D.

brother, H. W. Otis resided in Red Oak, Iowa. There are three children from his first marriage living; C. M. Otis, Tabor, Iowa; Mrs. Adda German, Persia, Iowa, and Mrs. E. M. Myers, Greenwood, Iowa. A grandson, Dr. Merrill M. Myers, is in the practice of medicine in Des Moines, Iowa. Dr. Otis, died from a septic blood stream infection after four days' illness on March 17, 1889.

DONALD MACRAE, SR., M.D.

Dr. Donald Macrae of Council Bluffs, a son of Rev. Donald and Jessie (Russell) Macrae, was born in Ross-shire, Scotland, October 3, 1839, and died at his home in Council Bluffs, Iowa, August 14, 1907.

His father was a minister of the Free Church of Scotland and his maternal grandfather, Rev. James Russell, was also a clergyman living at Gairlock, Ross-shire, Scotland.

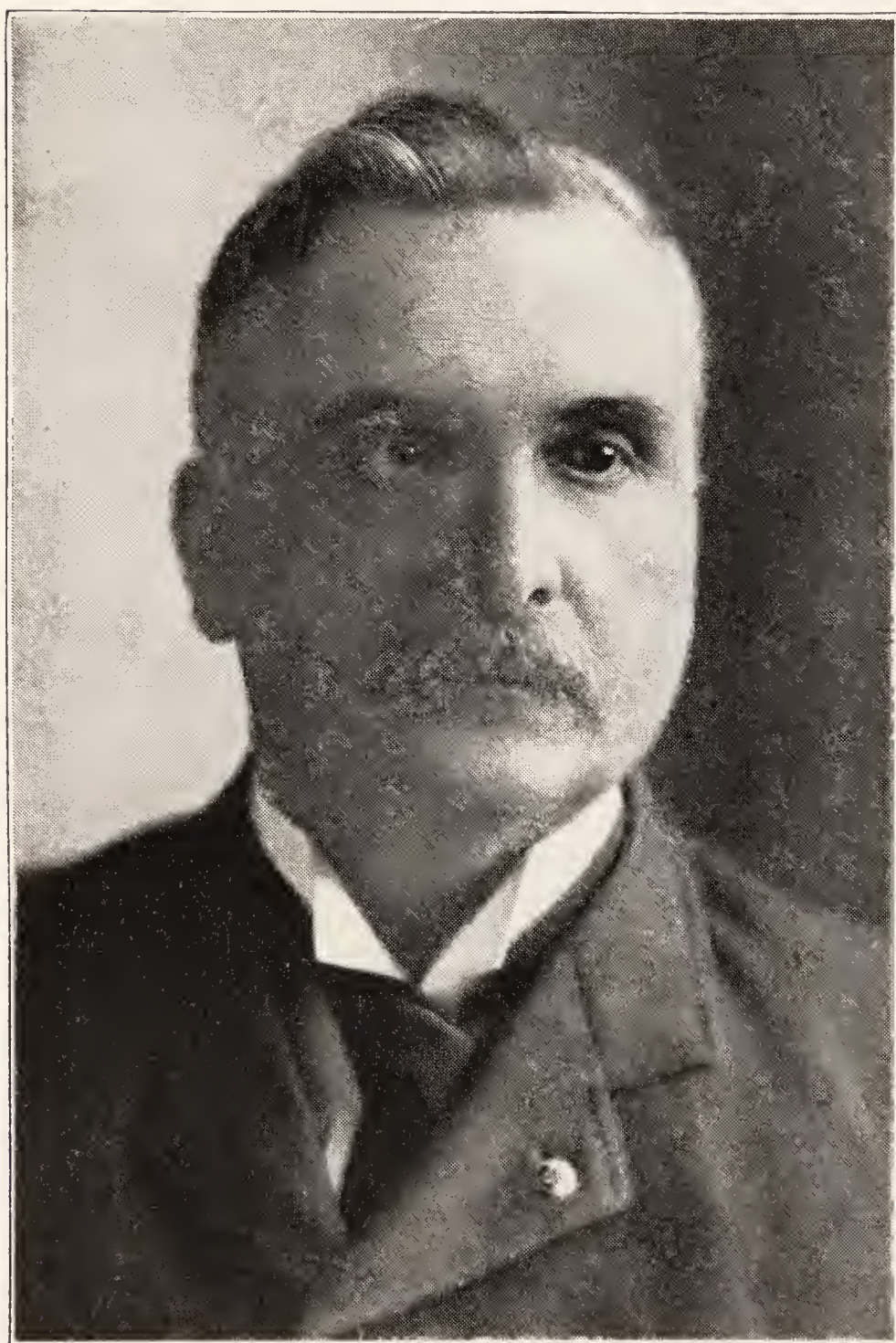
Dr. Macrae graduated from the University of Edinburgh medical department in August, 1861. His first professional experience was gained in Edinburgh Royal Infirmary for one and a half years. For four years he was surgeon with the Cunard Steamship Company and during that time crossed the Atlantic seventy-five times. On his last trip in 1867, he married Miss Charlotte Bouchette, a native of Canada, a daughter of Joseph Bouchette, surveyor general of Canada. Mrs. Macrae died March 28, 1904.

Dr. Donald Macrae came to Council Bluffs in 1867, where he practiced medicine and surgery about forty years. He was the most influential practitioner in western Iowa. For several years Dr. Macrae was professor of the principles and

practice of medicine in the Omaha Medical College, later the medical department of the Nebraska University and dean of the faculty. He became a member of the Iowa State Medical Society in 1883 and was president of the Society in 1888. He was a member of the American Medical Association and was the Iowa member of the last nominating committee preceding the reorganization. He was also a member of the International Medical Congress that met in Washington and also an original member of the Missouri Valley Medical Association and at one time its president.

Surviving Dr. Macrae are three brothers and one sister. James Macrae of Council Bluffs, Rev. John S. Macrae of Melbourne, Australia, F. A. Macrae of London, England, and Mrs. Mary Stewart of Melbourne, Australia.

Dr. Macrae never courted publicity, but on account of his high ideals was much respected by the people of Council Bluffs and by the profession of the state and nation. On reviewing the transactions of the Pottawattamie County Medical Society, Dr. Macrae's name appears at nearly every meeting and his voice was always raised in protest against any irregularity, shortcomings or derelictions of its members. Dr. Macrae inherited from his Scotch ancestors the uncompromising tendencies of his race, no personal advantage would lead him to swerve from the lines of right and justice, either in relation to his profession or in relation to his civic or social duties. He was also charitable to his brother physicians, but would never compromise with wrong doing or dishonest methods. These well known traits of character held a strong influence in keeping



DONALD MACRAE, M.D.

those who would go astray, in the straight paths of duty. Council Bluffs had the good fortune to have a group of medical practitioners of like-minded men, who, with similar views, kept medical practice clean and honorable, a high position which is maintained to the present day.

Dr. Macrae was succeeded in the practice of medicine by his son, Dr. Donald Macrae, Jr., who has attained distinction in his profession and in the service of his country.

Dr. Donald Macrae, Jr., was born at Council Bluffs, January 24, 1870, and after graduating in medicine, was associated with his father in the practice of his profession, until the death of Dr. Donald Macrae, Sr., in 1907. Like the father, the son has adhered strictly to high ideals of medical ethics and when the historian of the future shall review the work of the past and the present, the generations of Macraes will stand out in the honor list of Iowa physicians.

DOCTOR ANDREW WILSON McCLURE

Doctor Andrew Wilson McClure occupied a leading position in the medical life and development of the state of Iowa, having practiced in Henry county for forty-eight years, from 1856 until 1905.

The early years of his practice were full of vicissitude and sacrifice as the state was new, and the country undeveloped. Many visits were made on foot or horseback as roads were often impassable. Streams were forded, roads broken through snow drifts and dangers encountered in order to reach the bedside of the sick. Hospital facilities and nurses were unavailable so the at-

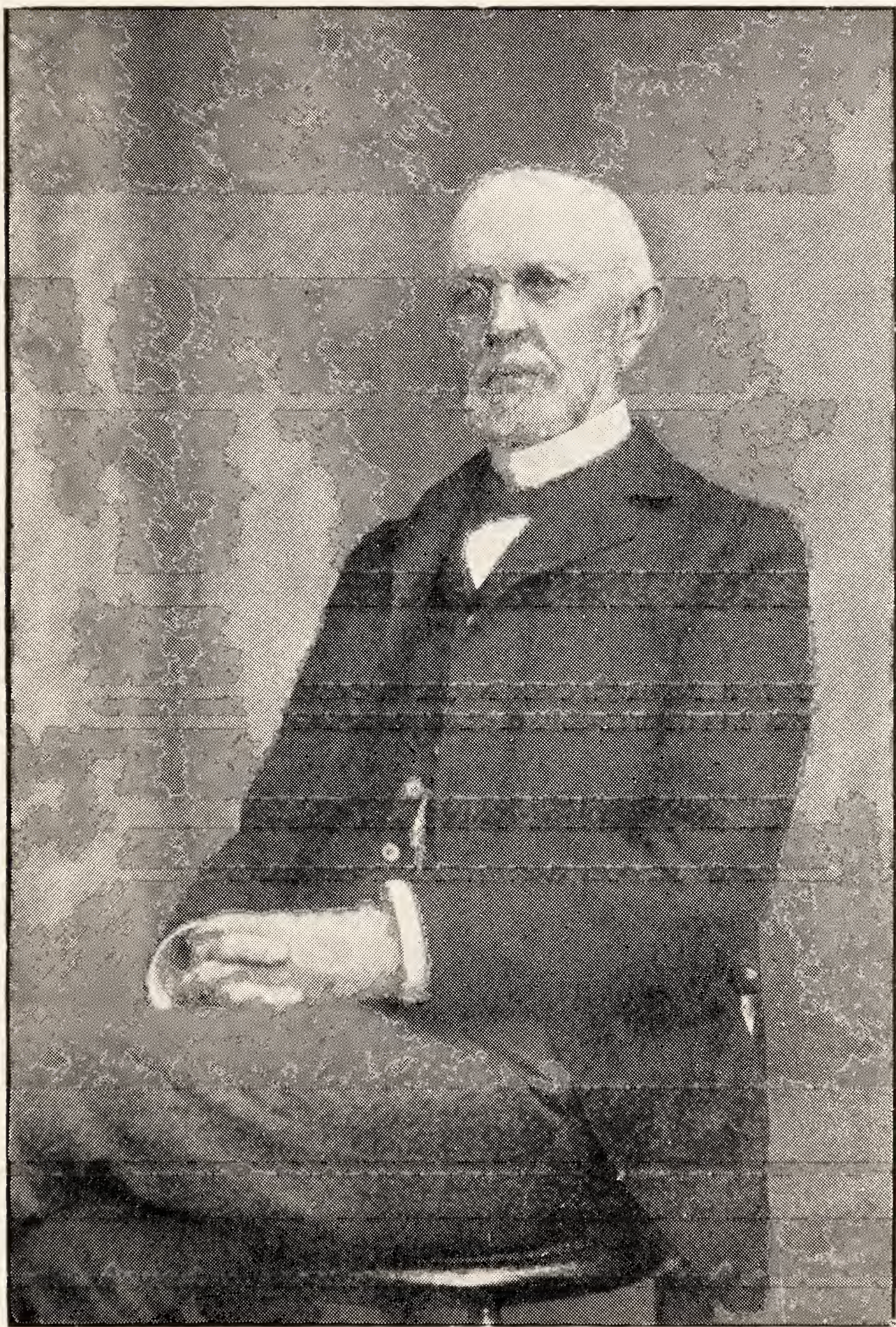
tending physician must often personally supervise the care of the patient.

Doctor McClure was born near Lebanon, Warren county, Ohio, June 10, 1828, and died in Mount Pleasant, Iowa, May 20, 1905. His early education was acquired in the district and academic schools of his native place. He was graduated from the Ohio Medical College in 1853 and after practicing three years in Paris, Illinois, he located in Iowa, forming a partnership with Dr. Wellington Bird of Mount Pleasant, one of the old established physicians of the place. In 1859 and 1860 Dr. McClure took a post-graduate course at the University of Pennsylvania and in later years he returned to the school for further study.

The call for troops in 1861 carried the doctor into the army as surgeon of the Fourth Iowa Cavalry, and he was promoted to brigade surgeon in the Vicksburg campaign at which time his health failed and he was obliged to resign.

In 1860 Dr. McClure married Emily C. Porter, a native of Iowa and a daughter of Col. Asbury B. Porter, a pioneer of the state and a gallant soldier of the Civil War. Two daughters of this union are living, May M., widow of Wm. F. Kelley, United States counsel general at Rome in 1916, and Martha, who retains the old family home in Mount Pleasant.

A busy professional life did not prevent the doctor from taking an active part in the political and business life of the state. He served the school interests as a member of the school board, was for many years a trustee for the Iowa State Hospital for the Insane at Mount Pleasant. He was president at different times of the Iowa



DR. ANDREW WILSON McCLURE

State Medical Society, 1886, district and local organizations, and a leader in the work of the American Medical Association.

Throughout his practice he was a frequent contributor to medical and other journals; the address he delivered before the State Medical Society in 1887 was copied in the leading journals of the country and his last article on "Mental Theraphy" attracted wide attention on account of the advanced ideas and practical suggestions. His counsel and sympathy to the members of the profession, especially to the younger members, was most dependable and valuable. He was an inspiration to such by his pure professional character as well as through his genial sympathetic mind. His example as a Christian, the breadth of his mind and the benevolence of his heart, the simplicity and purity of his life, his especial interest in the young, his respect for the aged and tenderness for the unfortunate, and above all his true friendship made him a useful citizen and a successful physician.

A friend and neighbor at the time of his death paid this tribute to Dr. McClure:

"As a physician he excelled in many lines but most of all his sympathy with those who suffered nervously; his quiet presence, his firm belief in his Creator, his apt and ready quotations from the Bible, have soothed and comforted when relief could not be obtained from *materia medica*, and hours of blissful repose have followed in the wake of his visit. A song of joy and thankfulness should rise for his beautiful and useful life which benefited humanity for nearly half a century."—F. C. Mehler.

RECOLLECTIONS OF EDWARD HORNIBROOK—A MEDICAL CHEVALIER

W. E. SANDERS, M.D., Des Moines

Dr. Hornibrook of whom Dr. W. E. Sanders speaks so reverently in the following appreciation of his life work in the practice of medicine, was born in the Province of Ontario, Canada, in 1838. His parents were natives of Ireland.

Dr. Hornibrook received his preliminary education in the public schools of Canada and his medical education at Victoria University, from which he graduated in 1861. He began practice the same year. In 1879 he came to the United States and located in Cherokee, where he continued in the practice of medicine until increasing years and failing health compelled his retirement.

Dr. Hornibrook died at his home in Cherokee June 30, 1924, at the age of eighty-six years.

The recent death of Edward Hornibrook of Cherokee at the age of eighty-six years, has taken from among us one of the most outstanding characters of our profession of the last generation.

My acquaintance with Dr. Hornibrook began, when I called him as a consultant to a farm house in Buena Vista county, in a case of diffuse peritonitis resulting from appendicitis, one afternoon in June, 1895.

After securing the history, and completing his examination, we strolled out into the apple orchard for a discussion as to what course to pursue.

My patient was a child about ten years old, who had been ill only three or four days, but was

still vomiting frequently and the abdomen was much distended.

As a novice in the art of healing, I had not considered her condition so desperate, but the large experience of my consultant showed him at once the almost hopelessness of the situation. He explained to the family that the chances were overwhelmingly against us, whether we operated or not, but concluded by saying, "If it were my child I think I would operate." With the consent of the family, and an improvised operating table, he quickly opened the abdomen, which was already full of fluid, tied off some gangrenous omentum and established gauge drainage. The patient died in shock ten hours later.

Dr. Hornibrook was at this time in his fifty-sixth year, a man of splendid physique, with a gentle and dignified bearing that impressed me greatly. He wore a blue serge suit with a white vest, and his smoothly shaven face, usually serious, lit up at times with an effusive smile that gave an unusual charm to his personality.

He enjoyed a most extensive practice, traveling the Illinois Central railroad from Ft. Dodge to Sioux City, and north and south from the Minnesota line to Onawa. He must have spent nearly half of his time in consultation work, driving by team night and day in all kinds of weather over the country roads for a radius of thirty or forty miles.

He was a dignified, courteous and skillful consultant, especially expert in the elicitation of a clinical history, and his large and diversified experience made him a master of diagnosis without recourse to laboratory methods, which were

rarely applicable to the conditions of country practice.

He was a surgeon of good practical judgment, a master of principles, rather than technique, and its practice he seemed to consider a duty rather than a line to be cultivated for its own sake.

His operations were always done in the home with the attending physician, and any neighbor or friend of the family whom he could press into service as his assistants.

In these days exploratory laparotomy was neither popular with the public nor the profession, and the necessity for a more specific diagnosis than acute abdomen, disease of the biliary tracts, or pelvic inflammatory condition, was calculated to temper one's zeal with prudence, and to make one weigh well the hazards of an undertaking that must reveal more than stringy bile or bloody sponges, and accordingly every operation undertaken was a serious challenge to one's reputation in the community.

Dr. Hornibrook was fearless in the face of definite indications and never shirked a responsibility, no matter how desperate the situation.

I remember one evening about twenty-two or twenty-three years ago, I called him on my own initiative to a case of intussusception, which I had just seen a few hours before. He arrived on a late train, and we drove about eight miles through the mud, to a farm house, arriving before midnight, much to the surprise of the family. Dr. Hornibrook sat down by the cradle, and with a serious face watched the baby for a half hour or so, scarcely saying a word. We then retired for a private consultation as was his usual



DR. EDWARD HORNIBROOK

custom, and after reviewing the case, he concurred in my diagnosis. We inverted the baby and gave repeated large enemas under high pressure to no avail. He then frankly stated the situation to the family, advising operation, but at the same time assuring them that an operation carried a very grave danger. They refused operation, and as we started home about midnight he remarked; "Doctor, they have relieved us of a very grave responsibility. The expectant mortality is more than 60 per cent, and the surgical not much better." The baby died two or three days later. To have operated by lamp light in a farm house at midnight required courage which he did not lack, but he knew too well the surgical limitations of the situation.

Early in my practice I called him to see a two year old child with an abdomen enormously distended with fluid, with night sweats and a low grade of fever, which I had diagnosed tuberculous peritonitis. On obtaining the history, he remarked that the onset was too acute for tuberculous peritonitis and made a diagnosis of huge appendicial abscess, and advised operation, which was refused. The family was ignorant and poor, and the surroundings miserable. With the zeal of a novice, I remarked to him as we were returning to my office that I would take the child to my own home, and operate it, if I thought we could save it. He replied thoughtfully, "Never begin that, Doctor, you will find that those for whom you do most are the least grateful, and the first to make you trouble when things go against you."

A week later the abdomen ruptured at the um-

bilicus, and discharged a chamber full of pus, and the youngster made a rapid recovery.

A few years later I called him to see a very sick boy with streptococcus phlegmon of the forearm. The treatment in the early stage had been wet packs and watchful waiting, during which period I experienced much trouble in controlling the mother and the neighbors. We opened and drained a deep abscess after which, Dr. Hornibrook expressed the hope that the son would make a good recovery. At this juncture the mother and meddlesome neighbor, both of whom were of a very garrulous type, launched into a laudatory expatiation of the wonderful skill I had demonstrated in the management of the case in which my consultant heartily concurred. I remarked on the unmerited praise of my admirers after leaving the house, to which Dr. Hornibrook responded by saying, "Never refuse a compliment Doctor, for if you put your compliments in one pocket and your cursings in another you will be about even at the end of the year."

About 1896 we were called jointly, he for his skill and I for political reasons, into the northeastern part of the state, to see a middle-aged woman who had been ill a long time. In consultation with the family physician, Hornibrook brought out a strikingly clear history of severe persistent pain and soreness in epigastrium and right hypochondrium associated with jaundice, fever, septic chill, and sweats, followed after some weeks, by a period of pain in the right side, dyspnœa, continuous fever and eventually the sudden expectoration of a very large amount of pus, with slight improvement up to the time we saw her, several months later.

The physical findings I do not recall but the sequence of events as he skillfully elected them, gave me, I thought, a clue to the diagnosis. After retiring for consultation, Hornibrook suggested that, inasmuch as I was the youngest of the consultants that the ethics of the profession allowed me to speak first. I made the diagnosis of biliary infection followed by subphrenic abscess, rupturing into the right pleura and discharging through a bronchus. He complimented me for my diagnosis by saying that I had expressed his opinion so clearly that he could add nothing to my own words.

We made this trip on a bitter cold night arriving about one o'clock in the morning, and finding no accommodations in the only hotel in the village, were assigned to an unheated room over a neighboring store. After getting to bed, Dr. Hornibrook, always very careful of his health, got up and placed his heavy astrakhan overcoat in his bed and wrapping himself up was soon fast asleep. Imagine my surprise, when I awakened about sunrise the following morning to find him up taking a cold sponge bath from the conventional bowl of water that sat on the stand between our beds. He must have broken the ice in the pitcher to do so.

One afternoon in company with a former classmate, I called on him in his office and he invited us to his home for dinner. After presenting us to Mrs. Hornibrook and his children, he led us into his library and gently closing the door, turned with a most serious face and said, "Gentlemen I have just this afternoon passed through one of the most serious trials of my life. A mother and father in one of the best families of

our town, and in which I have been the family physician for many years have just brought to me their beautiful daughter whom I have known since childhood, and she is three or four months pregnant." The lesson so well put, and stressed with such evident sincerity could not fail to impress a young man just entering into practice.

Dr. Hornibrook was not a Catholic, but his convictions on race suicide and sex morals was quite in accord with the teachings of the Mother Church. He believed that only the most imminent danger to the life of the mother justified an interference with pregnancy and then only after a concurrence with consul. Acting on his advice I once lost a primipara from pernicious vomiting, after a most stormy pregnancy of three months.

He was at this time professor of gynecology in the Sioux City College of Medicine, and consulting gynecologist of the State Hospital for the Insane at Independence. A year or two later, he saw with me, a huge, stout middle-aged woman with intestinal obstruction, an umbilical hernia, and a history indicating the fourth or fifth month of pregnancy. There was no evidence of strangulation at the umbilicus but she was vomiting frequently, was enormously distended and suffered such pain I had been obliged to keep her under morphine for several days.

The distention and mattress-like abdomen made examination very unsatisfactory but we thought we could make out a spherical mass filling the abdomen almost to the ensiform process. On examination under chloroform an elastic mass high in the pelvis was revealed. Dr. Hornibrook

made a diagnosis of a four or five months' pregnancy complicated by a large ovarian cyst, in which I concurred, as it seemed quite reasonable.

With his usual conservatism he suggested that we might operate the cyst, and conserve the pregnancy, or spontaneous miscarriage might ensue in which event we could much more safely deal with the cyst later. Adopting the prevailing policy of the day, "When in doubt wait," I continued the morphine and after three or four more stormy days my patient was suddenly delivered of five months' triplets associated with an extreme hydramnious and made a prompt recovery. In writing him of the happy outcome I facetiously remarked that "the cyst had undergone absorption"; to which he replied with apparent sincerity that, "It had perhaps ruptured during delivery." Dr. Hornibrook had that type of mind, which considered well before arriving at a decision and then held firmly to his convictions. Moreover the reversal of a diagnosis in those days was a mark of heresy which the public could not condone. He not only understood well the science and the art of medicine, but likewise the art of the practice of medicine. He believed firmly in himself, and recognizing his own leadership, was something of a martinet in the formalities of his consultations.

I once wrote and asked him to assist me in an abdominal operation for a large pelvic tumor. In reply he suggested that in justice to himself he first be allowed the courtesy of examining the patient and concurring in the diagnosis. To this I replied that of course, I expected to defer to his superior judgment but that my patient was too poor to pay for formalities, and I had accordingly

arranged for other assistance. The affair was passed in the best of grace and we frequently thereafter helped each other in our operative work.

His reputation amongst laymen was so great that he spoke with the authority of the oracle and had a masterly skill in the management of nervous cases. He once saw with me, a snappy black-eyed middle-aged widow who had made a matrimonial pilgrimage to my town and invaded the household of a prosperous recently bereaved brother-in-law. Through some hitch in the proceedings she excused herself from the dinner table one evening and was found in a swoon on the front porch, by the anxious brother-in-law. She immediately fell to "cribbing," passing at times into stereotyped attacks of pseudo angina. In spite of all my skill and reassurance, she kept that quarter of the village in an uproar night and day for forty-eight hours by which time the inflation of her epigastrium and the deflation of my skill were at the antipodes.

To stabilize the situation and prevent a panic I called in Dr. Hornibrook at 10 o'clock in the evening. In the seclusion of the counsel chamber he said, "Doctor, this is the class of case upon which a young man makes his reputation, upon the real ones he cannot." Out of consideration for the brother-in-law who paid the bills, I suggested that he frankly state the situation to both the friends and the patient. This he did very tactfully and fortified his statement by an appeal to the pharmacopea, prescribing equal parts of tincture of aloes and tincture of asafetida to be given in teaspoonful doses every two hours until relieved.

The result was marvelous. The neighbors soon dispersed, the patient later defecated and by the following noon her deflation had reached such a point that she hastily packed her suit case and departed, saying she was going home where they had doctors who knew how to treat a sick woman.

He was once called to our village to operate a deep seated scarlatinal suppuration of the neck for a medieval-like doctor whose friendship he coveted, but assistance for sanitary reasons he preferred to eschew. Dr. Hornibrook, with that ready tact in which he was never lacking, handed the doctor a paquelin cautery and placing him at a safe distance in the corner of the room told him to "Keep it at a cherry red glow," as he might encounter grave hemorrhage and instantly need it.

He was orthodox in his practice and seemed to firmly believe that if a patient died under the recognized treatment for his condition that the results could not have been otherwise. He was surprised that a teacher in the Homeopathic School at Iowa City should have said "That this school had no need for pathology, that they only treated symptoms anyway."

The complacent disregard for pathologic groundwork and the present vogue for disfunctional diagnosis and treatment with its Hellenized hyper-, hypo-, ortho-, meta and para-syndromies might almost seem to justify the professor's opinion and to suggest that for the first time the Greek Renaissance is upon us.

Indeed the never changing principle of cause and effect in the philosophy of events is endangered when we begin to speak of physical sequence without regard to physical antecedence, and place function above structure.

These mere verbal consolations by which indefinite and hypothetical concepts are so glibly hitched up to clinical medicine are but the smoke screens behind which we conceal our ignorance; the reflections, as it were, of an effete Spencerianism.

They serve better to appease our pride than the frank acknowledgment like our Roman forbears, that "to seek the final cause of things is futile and like a virgin consecrated to the gods bears nothing."

While Dr. Hornibrook was sectarian in his faith and practice, he once said, "I always grant to any man the right to select his own religion, his own doctor and his own wife."

While he recognized his own skill and was jealous of his own right, he was none the less, fair and just to others. When in the late nineties, Dr. William Jepson was admitted to examination without preparation and granted the degree of L. R. C. S. Edinburgh, Dr. Hornibrook seemed to appreciate the honor almost as much as if it had come to himself. A few years before he had made his only trip abroad and had visited some of the leading clinics of England such as Lawson Taite and Frederick Treaves, but was much impressed with Allendale's work in Edinburgh and related that in his clinic he saw a student administering a general anesthetic with difficulty and being somewhat chagrined by the jibes of his classmates, Allendale rebuked them by saying, "Gentlemen, this doctor is performing one of the most important operations in surgery."

Dr. Hornibrook took his work and his profession seriously, and was little given to levity. Notwithstanding his gentility he had a certain aus-

terity of manner which forbid familiarity, yet marked him as a leader of men. He seemed to follow the counsel of Washington, "to be courteous to all, but intimate with few, and let those few be well tried before you give them your confidence." His Canadian birth and education made him more the type of the English physician than the American. Although his life and training covered the period of the development of the evolutionary thought, I rarely heard him give expression on philosophic, political or religious lines.

He was a member of the Episcopalian Church and a Democrat, but he seemed to leave to the church the affairs of the spirit and to statesmen the functions of government, believing as he was wont to say "that to know one profession was enough to engross the mind of any man."

During the middle part of life he suffered a break in health probably of a nervous character, for he once told me that for two years he was completely cut off from professional duties and that this break in his medical reading, he felt he had never quite made up.

He once dropped a remark that suggests the philosophy of life to which he probably held. He expressed the desire before retiring to make a leisurely trip around the world and when on entering New York harbor to drop dead on deck.

Those who knew him thirty years ago, will recall the pock mark on his face which he carried from his student days in Toronto.

While in quarantine, with eyes swollen shut and attended only by a negro mammy, he asked her to get him an ounce of laudanum which he took with suicidal intent as soon as left alone. He said he was much disgusted when he awak-

ened thirty-six hours later, with the same wracking pains and the same distracting rattle of the wagons on the cobblestones below his window. "I reasoned I was going to die anyway, and that medicine was intended to relieve pain, therefore suicide was justified."

Although his long drives and broken rest was a severe strain on the physical endurance of any man, he rarely complained of fatigue. He was generally careful of his health and had for many years his buggy box swung at each corner on coil springs to break the jar of the rough roads. He had a sheep-skin bag, into which he put his feet and legs when driving in winter and a built-in space on either side of his seat where he often kept lanterns burning to warm his hands by. To one of the bows of his buggy top was hung a small bag containing tobacco, matches and his pipe, which he indulged in strict moderation.

In the fall of 1898 I became quite alarmed at the discovery in myself of a persistent light albuminuria. I was lecturing one day a week in Sioux City and I stopped off one evening, between trains, at Cherokee to consult Dr. Hornbrook about my condition. He assured me that I need not be alarmed that it was only the constant setting in my buggy driving over the rough roads and suggested that I arrange my rig as he had his and frequently change my position, sitting for a time like Abraham Lincoln, well down on the base of the scapulae, then changing occasionally, resting my elbows on my knees. As usual he reinforced his psychotherapy by prescribing three grains of Extract of Colocyuth Compound after meals, saying that a little stimulation of the liver after the hot summer would

help me. The result was gratifying, after a few days of purgation my albuminuria had disappeared completely and has remained so.

He had a masterful command of terse English which made his address and writings clear and forceful. His medical history of the Pomeroy cyclone was very well done indeed. Many will recall the sanity of his remarks, when at the Sioux City meeting of the State Society in 1912, he was pressed for a discussion of a paper on the Teachings of Sex Hygiene, in the course of which he declared that he was in full accord with the expression of Arch Bishop Farley of New York, "that the less said about sex matters the better." Certainly the last decade of sex hygiene propaganda has justified his opinion.

He was always a very busy man and must have had little time for outside reading, though his memory seemed to retain all that he had ever read or heard. The long country drives gave much time for serious reflection and judicious consideration of his cases and whether at the bedside or in discussions in medical societies he gave the impression that the question for consideration was one to which he had long since given serious study and decided for himself.

One stormy night, when returning from a consultation in the outskirts of our town, my village colleague was leading the way along a path, with a lantern, when Dr. Hornibrook broke out quoting from the 119th Psalm, "Thou art a lamp unto my feet and a light unto my path."

When John Watson brought out his Scotch Idyls in the middle nineties, under the title of "Beside the Bonnie Briar Bush", Dr. Hornibrook was much impressed with the character of the

old Scotch doctor in which he must have seen many reflections of himself. He also liked Burns. He remarked on one occasion, while we were being served dinner in Storm Lake, that our waitress strikingly recalled the face of Burn's Highland Mary. Indeed she had a rustic beauty so well expressed in the couplet, "Those rosy lips and sparkling glance that dwelt on me so kindly." Dr. Hornibrook possessed to high degree the spirit of self-mastery and was neither moved by flattery, nor adversity. He lived largely for his profession and his family. Though he enjoyed a large and lucrative practice for forty years he did not amass a great fortune.

On the occasion of the surprise celebration of the fiftieth anniversary of his doctorate, after he had been feted and toasted by his friends and fellow colleagues, he extemporaneously responded to the toast of "How It Feels", in a most masterful and dignified manner. He began by saying that he was at first somewhat at a loss to understand the purpose of the occasion, "Whether it was a reminder that the time had arrived for him to retire: whether it was an attempt to tickle the vanity of an old man, or whether it was rather, the token of a sincere friendship from his colleagues with whom he had labored so long; but that after listening to the felicitations of those who had preceded him he had resolved to accept the latter as true. He spoke for about fifteen minutes and concluded by saying, "When at last my work is done and I am laid away, I shall be most pleased, if upon the stone that marks my resting place shall be inscribed this simple epitaph. "Here lies a man who never shirked a duty." Few men are more worthy of such a remark.

I last saw him when I visited Cherokee in the interests of the Selective Service Draft in September, 1918. He was then in his eightieth year and his intellect seemed as clear as ever. Mrs. Hornibrook was then hopelessly ill and he spent much time with her. He took me out to the new city hospital and showed much pride in its construction and appointments, in which he had played a large part.

He spoke of retiring soon and I urged him as I had done before to write his memoirs, suggesting that his experience had been so full, so great, and so diversified, and that the relation of the physician to the public was so rapidly changing, that it would be a rich treasure for the generation of doctors coming on. He replied with a smile that he did not know that anyone would be especially interested in his experiences and so I presume, without a written record, there passed to his reward this great and noble man.

Through the courtesy of the Editor, the following paper is republished, the same having been first presented at the annual meeting of the Iowa State Medical Society, Creston, April 17, 18, 19, 1895. The author has added a few comments, appropriate with the passing of thirty years.

Walter L. Bierring, Des Moines.

THE MODERN TREATMENT OF DIPHTHERIA WITH DEMONSTRATION OF METHOD OF PREPARING ANTITOXIN*

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Among the entire list of infectious diseases there is perhaps not one more dreaded by the average physician or one in which a favorable response to the treatment excites a more grateful appreciation than that of diphtheria. It is not to be wondered at that any marked advance in its therapy should arouse the attention of the medical world.

The development of the modern treatment of diphtheria is but the result of the progress of our knowledge of the disease and its etiology. The time is no doubt fresh in the memory of many a colleague when diphtheria was one of the most vague and indefinite of diseases, when a positive diagnosis was an impossibility and uncertain therapy wandered from one remedy to another with no degree of reliability.

Compare this with the status of today when we have a disease clearly defined, an etiology

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definitely established, with a ready means of recognition and a therapy certainly more definite and scientific. As this was all brought about during the last decade, the rapid advance that has marked our knowledge is plainly apparent. Bacteriological research has played a role in this development and probably demonstrated in this particular more than in any other way that it has risen above the domain of purely theoretical investigation and become indelibly linked with practical advance in medicine.

The etiological significance of the Klebs-Loeffler bacillus has been fully established. The fact that in post-mortem examinations of diphtheria cases, and in those experimentally produced in the lower animal, the bacilli were only found present at the point of inoculation in the pseudo membranes, and not in the blood or the internal organs, led to the conclusion that the systemic disturbances which accompany the disease were not due to the direct presence of the bacilli themselves, but more to the absorption of some toxic substance generated by the bacilli at the point of inoculation.

This toxic substance or toxin of diphtheria is likewise produced in artificial culture media, especially in cultures prepared in bouillon, from which it can be separated by means of filtration through a Pasteur-Chamberland filter, the bacilli remaining in the filter and the filtrate containing a large quantity of the toxin.

The characteristics of the diphtheria toxin were first published in the classic contribution by Roux and Yersin in 1888. It is classed with the toxalbumins and its pathogenic characteristics are similar to those of the Klebs-Loeffler bacil-

lus. Inoculation experiments have shown that it is capable of producing the typical changes of the disease, even to the extent of the post-diphtheritic paralysis, without the formation of a false membrane. This more thoroughly establishes the etiological connection between the Klebs-Loeffler bacillus and the disease, as both by inoculation with the bacilli themselves and the toxins generated by them in an albuminous medium, the typical changes can be produced in the lower animal. In the resulting study of this toxin, it was developed that its attenuation is possible by various reagents. By successive inoculations of gradually increasing doses of strength of the toxin, an animal could be rendered accustomed to the same, i. e., be rendered immune against its action, and also against any following inoculation with the Klebs-Loeffler bacillus; furthermore the blood of an animal thus immunized by the use of the diphtheria toxin contains antitoxic principles, and this, when introduced into another animal body that has previously been inoculated with the toxin, has the property of antagonizing the same, or preventing its action. It was the researches in this direction by Behring and Kitasato, of Berlin, on the properties of the serum from animals rendered immune against diphtheria and tetanus, and published in 1890, that gave to the serum therapy its advent into medicine and formed the foundation of our present treatment of diphtheria—one that promises to be attended by such beneficial results.

In considering the modern treatment of diphtheria, the use of anti-diphtheritic serum, or antitoxin will certainly form an important part of the same.



DR. WALTER L. BIERRING

Formerly the attention of the physician was attracted mainly towards the local lesion, devising some means to remove or dissolve the false membranes or prevent their formation; later, when a better explanation was offered for the systemic disturbance—stimulants and supportive treatment became an important part of the therapy, yet with all our antiseptic gargles and sprays, combined with internal treatment, the rate of mortality tended to be greater than the percentage of cures. Hence, when the therapeutical value of the anti-diphtheritic serum was announced, it struck a responsive chord in the medical world that bordered on enthusiasm, although the memory of the unfortunate fate of Koch's tuberculin rather interfered with its adoption for a time.

The thorough investigations regarding the preventive and curative properties of antitoxin in the lower animals have received a most marked corroboration in its use in the human person. The first results being published by Ehrlich, Wassermann and Kossel in May, 1894, of the treatment of 225 cases in the Berlin hospitals, with a mortality rate of 24.5 per cent.

Then followed the report of Katz and Aronson of 178 cases with a death rate of 12.5 per cent, and following these came the report of 300 cases treated at the Hospital des Enfants Malades, in Paris, by Roux and Martin of Pasteur Institute, during the time from February 1 to July 24, 1894, with a mortality rate of 25 per cent in comparison with the average rate of 51.71 per cent of the four preceding years. The last named cases are of increased interest to me on account of having enjoyed the privilege of being a personal observer of a great number of the same. Another inter-

esting feature about them being the constant comparison that could be made with the Hospital Trousseau in which the antitoxin was not used, the statistics for the corresponding time showing a record of 520 cases with a mortality rate of 60 per cent, demonstrating at the same time that the epidemic was not of a benign character.

Since then it has come into more general use in the hospitals of Europe, and to a limited extent in our eastern hospitals with a marked lowering of the death rate. In private practice it has also withstood the test. The rather high expectations that were entertained for it has been to a great extent at least fulfilled. Thus far we have a record of its use in about 2300 authenticated cases, with a lowering in the mortality rate of at least 50 per cent over corresponding time of previous years.

I should like to report the result of its use in a certain number of cases in eastern Iowa. Davenport can furnish a case of diphtheria during any month of the year, and the cases are generally of a virulent character.

Through the kindness of Dr. H. Braunlich I am able to report the results of its use in sixteen cases treated by him, five of which in consultation with Dr. Henry Matthey, the patients ranging in age from thirteen months to thirty-one years, comprising twelve cases of pharyngeal, two of nasopharyngeal, one of pharyngeal with extension into larynx, and one of pure laryngeal diphtheria. Antitoxin was applied in the first case (and this was also its first application in eastern Iowa) on February 12, 1895, only one dose of Behring's serum No. 2, being applied, on account of the limited supply, yet the improve-

ment was very noticeable from this one injection, and although a fatal prognosis was determined upon by both attending physicians at the first visit, the case was discharged as cured on the ninth day. In twelve cases the Aronson serum was used in doses of 5 c.c., and in the remaining four the Behring No. 2 was injected in doses of 10 c.c. Fourteen cases received only one injection, one received two, and one case requiring three injections, the injections being made from the first to the third day of the disease, the point for injection in all but one being in the thigh, the remaining one in the subcutaneous tissue of the breast. In the sixteen cases there was one death, this occurring in the case of laryngeal diphtheria, which was also complicated by catarrhal pneumonia, death occurring about eight hours after tracheotomy was performed. In one case a slight urticaria occurred at the point of inoculation, but disappeared after a few days. In all these cases as far as it was possible to observe, the recovery was very rapid after the membrane had disappeared; that is, the patient returned to his natural condition in a very short time, and the disease was not followed by any sequelæ. Doctor Braunschlich has at present two more cases under treatment, the result of which I can not give as yet.

I have also received from Dr. Strohbehn, of the same city, a report of its use in one case of pharyngeal diphtheria with extension into the larynx, with a favorable result; one injection of 5 c.c., of the Aronson serum being sufficient.

I have the indirect report of two other cases of Dr. Henry Matthey and three cases of Dr. Bowman, one of the latter requiring intubation, recovery taking place in all cases.

Antitoxin was used for the first time in Iowa City on March 2nd, in a case aged seventeen years, of Dr. M. B. Cochran, in which I was called in consultation for the purpose of giving antitoxin. It was a very marked case of nasopharyngeal diphtheria—membrane covering uvula, tonsils, posterior wall of pharynx and posterior nares, with extensive glandular enlargements. The serum in this case was from a bottle presented to me by Dr. Roux of the Pasteur Institute in Paris, and was given in doses of 20 c.c., in all 55 c.c. being used. The throat was clear on the sixth day and recovery took place without any sequelæ except a slight erythema at the point of injection, which remained but a short time, the inoculation in this case being made into the subcutaneous tissue of the abdomen. Antitoxin has subsequently been used by Dr. Murphy in four cases, and by Dr. Mullin in one case with very beneficial results.

In the twenty-seven cases but one death occurred, which favorable results certainly demonstrate that it is a remedy that can be successfully applied in private practice as in the hospital ward.

During the last three and a half months the preparation of antitoxin has been in progress at the State University, with the cooperation of my assistant, Mr. L. W. Dean, and Dr. Shrader of Iowa City, who very kindly furnished the horse for the experiment, and I am able to present herewith the first sample of our production. The toxins necessary for the immunization have been produced in the laboratory, bouillon being used as a culture medium contained in the so-called Fernbach flask, which admits the passing across the surface of a constant current of moist air

which greatly enhances the production of the toxins. After a three weeks' growth the cultures are filtered through a Pasteur-Chamberland filter, the filtrate of which you see a sample here—then containing the toxins. The strength of toxin used in this case being that 1 c.c. of the toxin had the property of producing death in a rabbit of five pounds weight in forty-eight hours.

Injections into the horse were begun on December 15, 1894, the first dose being $\frac{1}{2}$ c.c. This was gradually increased, averaging about three injections a week, and the last injection was made on April 4, 1895, when 200 c.c. of the diphtheria toxin was introduced, illustrating to what an extent an animal can be rendered accustomed to this poison. The above being an evidence of an existing immunity on the part of the animal, the first tapping of her blood was made on April 9, 1895, when two quarts of blood were withdrawn from the jugular vein without seeming in the least to inconvenience the animal. The flask of this blood is represented here showing the contracted clot in the center, surrounded by the clear amber colored serum, some of which has been drawn off into these bottles and forms the so-called diphtheria antitoxin. Our experiments regarding its strength from our progress thus far, we may say that its strength will represent about 300 to 400 immunizing units, thus being somewhat weaker than the Behring article No. 1. This will restrict this sample more to immunizing purposes rather than being of therapeutic value, but by keeping up the injections of increasingly large doses for another month we will obtain a serum of considerable therapeutic value. It is necessary to continually keep up the

injections with the toxin, or the antitoxin properties contained in the blood will begin to disappear, and the more resisting an animal becomes to the action of the toxin, the greater is the strength of the antitoxin that is obtained from its blood serum.

Experience in both the lower animals and the human person has demonstrated that the sooner the antitoxin is applied in a case of diphtheria the more marked is its effect, so that the need of making an early diagnosis is only too evident.

The manner of making a scientific diagnosis is much less difficult than is generally supposed. Aside from the microscopical examination the culture diagnosis is quite simple, since we have in the use of sterilized blood serum a medium by which a differentiation from other organisms is readily made. By obtaining a small piece of false membrane or secretion from the inflamed part, upon a platinum wire needle, drawing the same several times across the culture medium upon three successive tubes, for the purpose of inoculation, these after being kept at body temperature for sixteen to twenty hours will show a growth of the Klebs-Loeffler bacillus in the appearance of very minute dots upon the surface of the medium; the affinity that the bacillus diphtheria has for culture media rich in albumen, causes it to appear from twelve to twenty-four hours before any of the other organisms that may be present in the material used for inoculation. By means of this culture method (and I hope some central depot may be established where the media can be obtained at a moderate figure) and observing the simple rules of bacteriological technique a positive diagnosis can be made within

twenty-four hours after receiving the membrane for examination.

Although the antitoxin appears to have a specific action in diphtheria it should not be relied upon as the only form of treatment. The use of stimulants and supportive treatment is always indicated, while the application of mild antiseptic solutions to the affected parts in the form of sprays or gargles for the purpose of cleansing and removing any detached membranes, preventing decomposition of the same, is certainly very beneficial.

Thus by this combined therapy, with injections of antitoxin of suitable strength, made as early as possible in the course of the disease, we have a method of treatment which has already been productive of such happy results. With increased experience and knowledge of its characteristics, we have every reason to hope it will offer us a means of combating this dreaded disease much more effectually than it has been possible heretofore. Eventually it may prove to be the salvation of the younger race.

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COMMENTS

At this meeting Dr. F. W. Porterfield of Atlantic, Iowa, also presented a paper entitled "The Treatment of Diphtheria with Antitoxin Serum", reporting seven cases with two deaths.

In the closing discussion the following is noted:

“Dr. Bierring—In regard to the antitoxin of our preparation, I beg to assure the physicians of Iowa that it will be used in very large doses on myself before being given out. I should like to see the state take hold of the production of antitoxin. I should be willing to offer myself to prepare the same with no idea at all of deriving any personal benefit from it. I should like to get enough of an appropriation so that the antitoxin could be procured by the physicians of Iowa at such a cost as will simply pay for the bottling and the slight expense of preparing the same. If it might be properly presented to the Board of Regents of the State University it might influence them to appropriate an amount so that the profession of Iowa could get the remedy at a nominal cost and which they could feel sure had been thoroughly tested before being sent out.”

In the general session on the next day, the following motion was introduced by Dr. E. Luther Stevens of Des Moines—“That a committee of three members be appointed by the chair to present a memorial to the Board of Regents at Iowa State University to ask an appropriation for the purpose of enabling an ample supply of antitoxin of diphtheria to be made at the State University for the use of the medical profession of the state”. Motion was lost.

It is interesting to contemplate the change in the subsequent events if this motion had been favorably considered.

The preparation of diphtheria antitoxin at the University Laboratory in Iowa City in 1895 and 1896 was the first produced in this country outside of New York City. The Iowa City product

was used in over 300 cases of diphtheria with no untoward serum reaction, which was really remarkable when viewed in the light of later results.

Mr. Lee Wallace Dean (M.D., 1896) was the principal associate in this work, and his research studies on diphtheria toxin and antitoxin formed the basis of his thesis for the degree of Master of Science granted by the University of Iowa in 1896.

During the thirty years that have passed since the above article was written, the technique of culture diagnosis has remained practically unchanged. In 1913 the Schick reaction or immunity test was introduced. This is now recognized as a valuable aid in the diagnosis of diphtheria, as a negative reaction is almost certain evidence that a diphtheritic infection is absent. In a well person a positive reaction indicates an absence of natural or acquired immunity to diphtheria.

A great change has developed in the dosage of diphtheria antitoxin and its mode of administration. Where a dosage of 1,000 to 2,000 units was regarded as sufficient thirty years ago, at the present time from 10,000 to 20,000 units are given in an ordinary case, while in a malignant case from 60,000 to 100,000 units are often administered.

Antitoxin is now administered in three ways—intravenously, intramuscularly and subcutaneously. It has been shown by Park that antitoxin diffuses ten times more rapidly when given intravenously than when given subcutaneously, and four times more rapidly when given intramuscularly than when given subcutaneously. In all

laryngeal and other severe cases the intravenous method is the one clearly indicated.

By comparison it may be said that the fundamental principles of the antitoxin treatment of diphtheria as established thirty years ago hold good today.

Bankers Trust Building, Des Moines, Iowa.

EARLY IOWA PHYSICIANS

Dr. H. H. Clark of McGregor, died at his home January 18, 1925. He was born on October 12, 1842. His family moved to Illinois when he was eight years old, taking up a farm near Freeport. When he was eighteen years old he enlisted in the 92nd Illinois Mounted Infantry and served four years.

After the war, he entered Rock River Seminary and after completing his course there he studied medicine and graduated from the Chicago Medical College (Northwestern) in 1869. He served as an intern at Mercy Hospital and in 1870 located at McGregor.

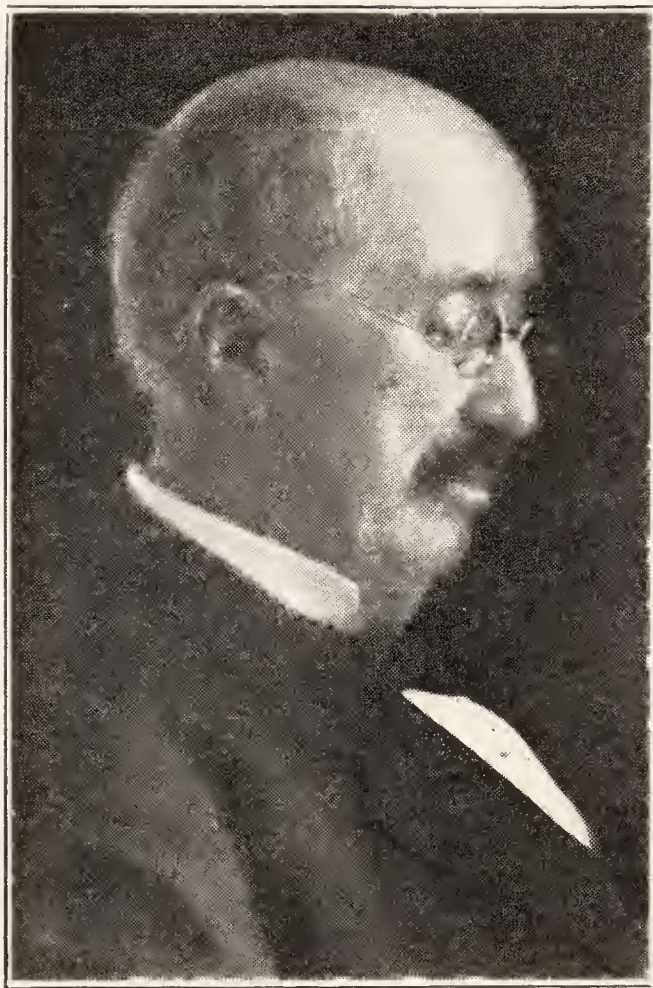
Dr. Clark was an energetic worker and early engaged in active civic and professional matters. His interest in health activities led to his appointment as a member of the first State Board of Health, passed by the Iowa legislature on the 26th day of March, 1880, and approved by the governor on the 23rd day of April, 1880. The board consisted of William S. Robertson, M.D., Muscatine; Phillip W. Lewellen, M.D., Clarinda; Wilmot H. Dickenson, M.D., Des Moines; Henry H. Clark, M.D., McGregor; Justin M. Hull, M.D., Lake Mills; Ephraim M. Reynolds, M.D., Waterloo. At the first meeting of the board, May 5, 1880, Dr. Robertson was elected president and L. W. Andrews secretary, to be succeeded on May 25, 1881 by Dr. J. F. Farquarson. Dr. Clark served on the board thirteen years.

Dr. Clark in his oration on Surgery at the 1916 session of the Iowa State Medical Society, en-

titled, "Then and Now", presented some of his early experiences in McGregor. He writes:

"In the year 1870, armed with a diploma from the Chicago Medical College (now Northwestern University College of Medicine) and the experiences as intern at Mercy Hospital I bade adieu to Chicago and turned my face westward. At Dubuque I heard of the growing importance of the up-river town, McGregor, and on a Sunday morning in April, straddled my little bay horse, my only worldly possession of value, saving a few books and instruments, set forth across country to look over the chances the new town had to offer a bright and aspiring physician. I rode into McGregor just as the church bells were ringing for evening service. That was forty-six years ago (55 years). I have been there since with the exception of a couple of days now and then to attend a medical meeting or similar form of recreation.

"At the time I came, McGregor was a hustling little city of 4000 population. There were nine doctors in the town, but a clinical thermometer was unknown. Dr. Frederick Andros was the only one who could boast of a hyperdermic syringe. Dr. Andros had been the first member of our profession to penetrate the wilderness that, in 1837, the year he came to northeastern Iowa, lay north of Dubuque. (Dr. Frederick Andros came to Dubuque in 1833, the first doctor to definitely locate in Iowa. Graduated from Brown University 1822, A.B. and M.D., 1826.) He built the first house in Garnavillo, the county seat of Clayton county, which at the time comprised all the territory from Turkey River north



DR. H. H. CLARK

to the Canadian border, and west to the Rocky Mountains.

"After years of practice at the county seat and some service for the Indians at the Yellow River and Fort Atkinson missions, the Doctor finally located at McGregor. There he soon became recognized as the surgeon not only for the town, but the surrounding country for miles, he was the only man thought of when a surgeon was required.

"A few days after my arrival, I called on the Doctor, then nearly seventy years old, and presented my credentials. He gave me the glad hand and we became firm friends. Some months before, he had met with an accident which had seriously impaired the strength and usefulness of his right hand, my association with him was therefore fortunate, for, while he was the surgeon and received the credit if any were due and emoluments, if any such were forthcoming, I did the work and gained the experience.

"Our association continued in this manner for about ten years, when the Doctor decided Iowa was getting too civilized and tame, and went West to grow up with the country. He was then eighty years old. After practicing in Dakota for ten years, he changed his residence to Minneapolis, where he died at the age of ninety-one years.

"Dr. Andros was far superior in intelligence and ability to the average physician of his day, but he was a typical frontiersman and something of a character. I remember a country drive I took a short time after I came to McGregor. He drove a good horse but he interfered so badly that either his right or his left hind leg seemed

to be in the air all the time. As we were jolting over a rough road back in the Mississippi hills, the Doctor suddenly stopped his horse and remarked, 'There's the damndest nicest spring over there you ever saw'. We got out and walked over to where a fine stream of water gushed from the rocks and formed a pool about three feet in diameter and eighteen inches deep. The Doctor took off his high silk hat which he always wore and in which he carried his letters, red bandanna, cigars, stethoscope and always either a clean or dirty collar, pulled off his coat, rolled his sleeve to his elbow and thrust his hand to the bottom of the spring. After lifting aside a few stones he pulled out a flask of whiskey. He uncorked it, took a generous drink and then returned the bottle to the bottom of the spring for future use.

"If there is any particular reason why during my work of forty-six years (55) in McGregor I have done more or less surgery, it is in all probability due—no, not to Dr. Andros' bottle in the spring, but the fact that he was growing old, had a crippled hand and was my friend. The truth is that inasmuch as no one in my locality until very recent years gave anything like especial attention to surgery, the field was largely mine and so, while I claim no expert knowledge and have never posed as a surgeon, I have taken care of a large number of surgical cases and have sometimes been called a surgeon. I need not tell you that such is not now the case and later on may give you a hint as to the why and wherefore."

Dr. Clark has set forth his association with Dr. Andros, an interesting chapter in the lives of the two notable men who early engaged in the practice of medicine in northeastern Iowa. In

his fifty-four years of practice in McGregor, Dr. Clark was witness to an evolution in the practice of medicine and surgery in its several stages. In the early years surgery was limited to the surgery of emergencies, but the time was not far off when the field was to be greatly extended, and while Dr. Clark had his surgical ideas developed in the "old days", they were not fixed beyond the possibilities of change, and as surgeons entered new fields, he also took his part in the new surgery. To do this more effectually, he provided himself with the necessary facilities and first of all was a hospital, and, assisted by his daughter Dr. Alice Clark Brooks, a creditable hospital was organized.

Dr. Clark was a surgeon to the C. M. & St. P. Ry. Co. for fifty years, and when the C. M. & St. P. system surgical association was formed, he became an active member. The writer recalls numerous occasions when Dr. Clark, participated in the discussion of problems which were of particular interest to railway surgeons; he was always quite positive in his views, which he did not hesitate to express.

In 1871 Dr. Clark and Miss Judith Baugh, daughter of Judge Downing Baugh, were married, and to them six children were born, four of whom, with Mrs. Clark, survive him.

IOWA INSTITUTION FOR FEEBLE-MINDED CHILDREN AT GLENWOOD, IOWA

Through the courtesy of Dr. George Mogridge, the present superintendent, we have been able to collect data for an outline history of this important institution.

Like so many of our public welfare institutions for the betterment of the unfortunate members of society, the inception of this one emanated from the broad and liberal mind of a member of our State Medical Society.

In 1873 Dr. W. S. Robertson of Muscatine became impressed with the number of idiotic and imbecile persons in Iowa, commenced a series of investigations to ascertain their number, condition and needs, which he embodied in his presidential address before the Iowa State Medical Society in 1874. This is probably the first public plea in the interest of feeble-minded in Iowa. It may be noted that Dr. Mark Ranney, while superintendent of the hospital at Mount Pleasant, made an effort before the Eleventh General Assembly in 1866 for the relief and benefit of idiotic and imbecile persons in Iowa.

Without accurate census data Dr. Robertson estimated that in 1873 there were at least 1200 idiots and imbeciles in Iowa. At the close of Dr. Robertson's impressive address, the State Medical Society passed a resolution in favor of the establishment of an institution by the state for the care and training of the feeble-minded in Iowa. Dr. Robertson also made a strong plea before the legislature.

On the first day of February, 1876, Hon. C. C. Horton, member of the House from Muscatine, introduced House File No. 240, which was "A bill for an act to provide for building an asylum at Glenwood, Mills county, for the idiots and feeble-minded of the state". After reference and amendments, it finally passed both the House and Senate, and the act was approved by Governor Kirkwood March 17, 1876.

During this struggle to secure an act to provide an institution for the feeble-minded in Iowa, Dr. Robertson availed himself of the advice and aid particularly of Dr. C. T. Wilbur, superintendent of the Institute for Feeble-minded Children for the State of Illinois.

"The above institution was organized July 1, 1876, under an act passed by the Sixteenth General Assembly of Iowa creating the same. This enactment was modified somewhat by the Nineteenth General Assembly, and the information as to eligibles is taken from the laws of that session.

"The law of the aforesaid Nineteenth General Assembly recites that 'every child and youth residing within the state within the ages of five and eighteen years who, by reason of defective intellect is rendered unable to acquire an education in the common schools, is entitled to receive the physical and mental training and care of this institution at the expense of the state. The county superintendent in each county, on the first day of October to report to the superintendent of the institution the name, age, and post-office address of every person in his county of such age who, by feeble mental and physical condition is deprived of a reasonable degree of benefit from the

common schools. And also to give the name and address of parents, guardian, or nearest friend of such person'.

"During the first years of the life of the institution there were received eighty-seven children; at the end of ten years the population was 259, 164 males and 95 females; at the end of twenty years a total of 574, 334 males and 240 females; at the end of thirty years a total of 1038, 565 males and 473 females; at the end of forty years a total of 1409, 733 males and 676 females; at the present time, forty-eight years after its establishment, the inmate population is 1539, 749 males and 790 females. Of this grand total there are enrolled in the school classes about six hundred, the others being enrolled in what is termed the custodial division.

"The present school force consists of seventeen teachers, and the branches taught include the usual academic work, vocal and instrumental music, domestic science, physical training, manual work of all kinds, including sewing, fancy needle work, basketry, lace making, etc., for the girls, and for the boys bench work, and making of heavy baskets. Later in their training the children take part time school work, and are also instructed in laundry work, general household duties, cooking, serving, etc., for the girls, and for the boys cobbling, carpentry, painting, printing, gardening, etc. Others who have passed through the entire school period where they have been instructed by ordinary methods, are gradually brought into fuller activities by being detailed to the various departments of the institution, where they assist in the economy of the same."

The bill passed and signed by Governor Kirkwood March 17, 1876, provided: First, for the establishment of an asylum for feeble-minded children to be located at Glenwood on property already owned by the state. Second, the purposes of this institution are for the care, support, training and instruction of feeble-minded children. Third, it provided for the appointment of a board of three trustees, and for the appointment of a superintendent and other resident officers. Fourth, the age of admission to be between seven and eighteen years, and defines the method of obtaining admission. Fifth, it provided a support fund of \$10 per capita, per month, and in addition the sum of \$2,000 for salaries and wages, also for certain sums for the purpose of securing furniture, repairing buildings and other incidental expenses.

On March 15, 1876, a joint convention of the General Assembly elected the following named gentlemen as trustees: Dr. W. S. Robertson of Muscatine, A. J. Russell of Glenwood and Jonathan W. Cattell of Des Moines. These trustees convened at Glenwood April 26, 1876, and effected an organization as follows. Dr. W. S. Robertson, president; A. J. Russell, treasurer, and J. W. Cattell, secretary. The board of trustees then took possession of the property set aside by the state; it being the property heretofore held and occupied by the Western branch of the Iowa Soldiers' Orphan Home.

The condition of the property was bad and extensive repairs were necessary for use as an asylum. After the buildings had been repaired, the next step was to secure a superintendent, and the trustees selected Dr. O. W. Archibald of

Glenwood, who had formerly been an assistant physician at the Mount Pleasant Hospital for the Insane. He was also made secretary on the resignation of Mr. Cattell. Mrs. S. A. Archibald accepted the position of matron.

Early in 1882 Dr. Archibald resigned as superintendent and Dr. F. M. Powell of Glenwood was elected to fill the vacancy. Previous to the resignation of Dr. Archibald efforts were made to secure the removal of the institution from Glenwood, but failed.

In 1903 Dr. Powell died and Dr. George Morigridge, the present superintendent, was elected.

The history of this institution has been full of interest as showing the difficulties that lie in the way of securing legislative appropriations for the care of the unfortunate in the earlier days of the state, when economy was necessary and when the representatives of the people were slow in voting money for almost any purpose which would impose taxes upon a people who were impatient of burdens which could be avoided.

It is also of interest to observe the ready response of members of the medical profession in securing benefits for the unfortunate members of society who were physically and mentally unfit to meet the conditions of our complex civilization.

CHEROKEE HOSPITAL FOR THE INSANE

GERSHOM H. HILL, A.M., M.D., Des Moines

The Twenty-fifth General Assembly decided to build a hospital for the insane in northwestern Iowa and appointed a commission to visit and report on the sites proposed at Cherokee, Le Mars, Sheldon, Storm Lake and Ft. Dodge. Drs. Gilman, Hoyt, Hill and F. McClelland of Cedar Rapids were named the commission by an agreement, in the finding, in joint session, the report of the commission was heard and by ballot, Cherokee was chosen. At this same session of the legislature the City of Cherokee promised to have a side track made by the Illinois Central R. R. to the farm where the buildings were to be erected, so that brick and stone could be delivered with a locomotive, and coal and fuel in abundance in mid-winter and in rainy weather, and the building committee thought the Burroughs land near town suitable for the patients to cultivate and bought it at \$45 per acre. Red or light colored jasper was used for the first buildings erected. They have slate roofs. The Cherokee Hospital as it now stands shows the good materials that have been used, the advantages of the railroad for the transportation first of building materials, then of coal, and of various kinds of supplies.

In August, 1902 the board of control elected Dr. Voldeng as the first superintendent. He had served the state at Independence as assistant physician. Matthew Nelson Voldeng was born on the farm of his father, Nels Lars, and his mother,

Anna Mathis Voldeng near Decorah, Iowa, January 21, 1863. He attended Luther College at Decorah receiving A.B., 1883. He graduated in medicine from what is now the University of Illinois in 1887. Post-graduate work was done in Berlin, Paris and London in 1855-56. He wears the honorary degree of L.L.D. given by Buena Vista College, Iowa, in 1914. He was the assistant physician in the State Hospital at Independence seven years until his resignation in 1895. While engaged in private practice in Des Moines he was professor of pathology 1897-98, and in charge of neurology and psychistry 1899-1902, Drake University School of Medicine. He was then elected by the board of control to prepare, open and take charge of the new State Hospital at Cherokee. After thirteen years he was transferred from Cherokee to Woodward, where as superintendent and medical director of the State Hospital and Colony for Epileptics, he again has demonstrated his ability to establish, organize and put in operation an up-to-date institution with suitable equipment.

Dr. George Donohoe, the second superintendent of the Cherokee Insane Hospital, was born in Massachusetts in 1876; his early education was acquired in his native state; he graduated from the Boston State Hospital. Became the second assistant physician and acting pathologist in the State Hospital at Independence. When a superintendent was needed to take charge of the Iowa Inebriate Hospital at Knoxville, Dr. Donohoe was appointed there. When Dr. Voldeng left Cherokee Dr. Donohoe was immediately elected by the board of control to become the second superintendent at Cherokee.

PSYCHOPATHIC HOSPITAL, IOWA CITY

GERSHOM H. HILL, A.M., M.D., Des Moines

In August, 1921, when Dr. Lowrey was assistant director and associate professor of psychiatry he gave the following history of this specialty in the United States:

The law establishing a State Psychopathic Hospital was enacted in 1919, Ch. 235 of the Thirty-eighth General Assembly. It provides for the establishment of a hospital, especially designed, equipped and administered for the care, observation and treatment of persons who are afflicted with abnormal mental conditions. The hospital is put under the management of the State Board of Education to be located at Iowa City and connected with the College of Medicine of the State University. The board appoints the medical director who shall serve as professor of psychiatry in the College of Medicine. The director in addition to having charge of the hospital shall seek to bring about systematic cooperation between the several State Hospitals for Insane and the State Psychopathic Hospital. Provision is made for him to visit and advise the hospitals, on request. The law carries the first provision made in the state for admission of voluntary patients to a state hospital for mental diseases. It provides that they may come voluntarily, either as public or private cases. Patients may also be committed by judges of the district court or superior courts as suffering from an abnormal mental condition which can probably be remedied by observation, treatment and hospital care. The expense to be

borne by the family or the county as the county may decide. It will be noted that this form of commitment does not carry with it the idea of judging the person insane which many people don't like, preferring to think that the patient is sick, as indeed he is. We have then four legal classes of patients, viz.: Voluntary, private coming, voluntary public, committed private and committed public. Of these, the second, an order of the judge that support be paid from public funds, the third, an order of the commitment by the judge; the fourth, an order of commitment and an order for public support. Ample power is given the director to insure that the hospital may select its cases and transfer to the district state hospitals cases not regarded as suitable for the psychopathic, or cases which prove to be chronic or incurable. The original provisions were somewhat modified at the last General Assembly, but the same ends are each preserved and subserved. The total appropriation of \$272,000 was granted by the Thirty-eighth and Thirty-ninth General Assemblies for the building and equipment. The plans were drawn by the director, Dr. S. T. Orton. It contains sixty beds with ample day space, so arranged, that a classification of the patients may easily be arranged with respect to their therapeutic needs. There is an ample and well arranged out-patient department, offices and needed rooms for the medical and social service, laboratories for chemistry, serology, pathology, psychology and experimental work; library class room and teaching laboratory. It is in my opinion the best plant in this country for the particular work.

The first psychopathic hospital in this country was established at the University of Michigan in 1906. The Boston Psychopathic was opened as a department of the Boston State Hospital in 1912. The Henry Phipps Psychiatric Clinic was opened in Baltimore in 1913. The New York Psychiatric Institute was re-organized in connection with the Manhattan State Hospital in 1902.

The first psychopathic hospital in this country was established at the University of Michigan in 1906 and the State Psychopathic Hospital in Iowa located at Iowa City is the second one of the kind in the United States, and it is to be observed that the four state hospitals already described are wholly under the management of the State Board of Control while this one according to the law of Iowa is under the care of the State Board of Education. The Board of Education visits the Psychiatric Hospital somewhat as it does the other hospitals under and managed by the state at Iowa City and provides by-laws as it does to the other hospitals at Iowa City and directs Dr. Orton as it does the other doctors working for the state at Iowa City.

We learn from the American men of science that Dr. Samuel Torrey Orton was born at Columbus, Ohio, on October 15, 1879; that he received the B.S. degree at the Ohio State University in 1901, and his M.D. diploma from Pennsylvania in 1905. His A.M. degree came from Harvard in 1906. He was pathologist and clinical director of Worcester State Hospital, Massachusetts, from 1910 to 1914; he was instructor in neuropathology at Harvard in 1913. He was a scientific director in Pennsylvania Hospital at Philadelphia before he had the professorship

which he has occupied at Iowa City. As professor of psychiatry and director of the State Psychopathic Hospital since he came to Iowa.

JAMES TAGGART PRIESTLEY, M.D.

OBITUARY

James Taggart Priestley, M.D., one of Iowa's most noted physicians died at his home in Des Moines, December 11, 1925, of heart disease, after an illness of more than a year's duration.

On July 19, 1922, Dr. Priestley celebrated his seventieth birthday and his fifty years of practice of medicine. At this time his friends arranged a complimentary dinner as an expression of appreciation of his long and distinguished services as a practitioner of medicine in Des Moines. Dr. Priestley himself felt that this was an opportune time to retire from active practice of medicine and to employ the residual time allotted him in travel and reading, and thus enjoy the fruits of the long years of service rendered to an appreciative state and city. But it was not long before he began to suffer the effects of the years of unremitting and anxious work of a general practitioner. The organ which is so sensitive to the influence of such prolonged and exacting labor, began to show signs of failing and the anticipated days of happiness were clouded by periods of cardiac distress, which, to one familiar with the dangers of such manifestations, was a constant source of depression and apprehension. Notwithstanding this constant menace, Dr. Priestley maintained a cheerful exterior and a constant interest in his profession, as manifested by his frequent attendance at the meetings of his county medical society.

The October, 1915, number of the Journal of the Iowa State Medical Society was a Fest-

schrift number in honor of Dr. Priestley, who had completed forty years practice. The contributors were his professional associates. One of the contributors was Dr. Walter L. Bierring, who, under the title of "James Taggart Priestley, Historical and Personal", presented an outline of Dr. Priestley's life work, which we reproduce.

Dr. Priestley was born in Northumberland, Pennsylvania, July 19, 1852. His great grandfather was Joseph Priestley, who discovered "pure dephlogisted air", later named "oxygen" by French chemists. Joseph Priestley was born in England in 1733, came to America in 1794 and died in Northumberland, Pennsylvania, in 1804. He was an intimate friend of Benjamin Franklin who urged him to locate in Philadelphia. He was offered the chair of chemistry in the University of Pennsylvania, but preferred the quiet life of a small town where he established a laboratory. Joseph Priestley was a minister and accepted the position of pastor of a small Unitarian church. Dr. James Taggart Priestley's father was a veteran of the Mexican War.

Scientific study and the practice of medicine had an attraction for the Priestley family. Sir William O. Priestley, a member of the family, was a celebrated English obstetrician.

Following Dr. James Taggart Priestley was his son Dr. Crayke Priestley, a young man of great promise, who died early in his professional career, and the two grandsons are now attending the medical school of the University of Pennsylvania.

Dr. James Taggart Priestley located in Des Moines in 1876 and devoted himself to internal medicine. At that time there were but few spec-



JAMES TAGGART PRIESTLEY, M.D.

Born July 19, 1852

Died December 11, 1925

ialists and, in our country, medicine and surgery were joined, but in a few years, by a process of election in centers of population, men became physicians or surgeons. Dr. Priestley believing there was a wider field in internal medicine, elected the latter and consistently adhered to his choice which brought him honor and distinction. He once stated to the writer that he had sustained at one time or another, the relation of the physician or consultant to every Supreme Court Justice of Iowa, which he held as a distinguished appreciation, a sentiment in which we fully concurred.

HISTORICAL AND PERSONAL

It seems most difficult to add a personal note to an estimate of the friend and colleague, as he lives in our midst, without having the strong feelings of regard present a picture that will not be a true measure of the man and his work. It is but right that a man should be judged by his own work, and not by the deeds of his forefathers, but if only for the sake of history, it is interesting to recall that the name of Priestley has been honored by his fellowmen in preceding generations as well as in this. That the direct lineal descendant of Dr. Joseph Priestley, the discoverer of oxygen and one of the most remarkable characters of his period, has labored here in the interest of Iowa medicine these forty years, seems worthy of notice.

In this day of specialized labor, and remembering the age in which Joseph Priestley lived, 1733-1804, it is difficult to appreciate the unusual combination of theologian, scientist, and politician. When we consider again the crude state of

knowledge of the physical sciences of that period, it seems indeed remarkable that one, who was trained for the ministry, should after middle life become an acknowledged authority on the chemistry of the gases, the friend of Dr. Benjamin Franklin, and the contemporary of the great Scheele of Sweden and Lavoisier of France.

Priestley's reputation as a man of science rests upon his numerous and important contributions to the chemistry of gaseous bodies; to form a just estimate of his work, and the extent to which it advanced the knowledge of fact and the development of sound theoretical views, we must reflect what chemistry was in the first half of the eighteenth century. The vast science which now passes under the name had no existence. Air, water and fire were still counted among the elemental bodies; and though VanHelmont, a century before had distinguished different kinds of air, and Boyle and Hales had experimentally defined the physical properties of air, no one suspected the existence of the numerous totally distinct gaseous elements which are now known, or dreamed that the air we breathe and the water we drink are compounds of gaseous elements.

In his autobiography Joseph Priestley states that he first became interested in chemistry in Leeds where he moved in 1767 while living next door to a public brewery. He amused himself with making experiments on the fixed air which he found ready made in the process of fermentation. Following this he discovered more new gases than all his predecessors had done, in spite of the fact that he was without the careful scientific training of his contemporaries, and compelled by reason of his limited income as a min-

ister, to create his own apparatus. He laid the foundation of gas analysis; he discovered the complimentary action of animal and vegetable life upon the constituents of the atmosphere; and finally he crowned his work, in 1774, by the discovery of the "pure dephlogisticated air" to which the French chemists subsequently gave the name of oxygen. Its importance as a constituent of the atmosphere which disappears in the processes of respiration and combustion, and is restored by green plants growing in sunlight, was proved somewhat later.

For these brilliant discoveries the Royal Society elected Priestley a Fellow and gave him their medal, while the Academies of Paris and St. Petersburg conferred their membership upon him. Edinburg had made him an honorary doctor of laws, at an early period of his career, and it is interesting to note that because Priestley's tenets of religious faith were not in harmony with the established church of England, he received no recognition from the universities of his own country.

It was because of religious controversies that he was compelled to flee from Birmingham in 1793, where during a riot his property, apparatus and much valuable scientific material were destroyed. For a short time afterwards he was in charge of a small church in a suburb of London, but then he decided to emigrate to America where his three sons had preceded him the year before.

While evidently a man of radical views in matters of religion and politics, he was a sincere seeker after truth, and all records refer to him as a man of unblemished reputation and irreproachable moral character; Huxley further

states that Joseph Priestley was no gloomy fanatic, but as cheerful and kindly a soul as ever breathed, the idol of children, one who charmed away the bitterest prejudices in personal intercourse, who never lost a friend, and the best testimony to whose worth is the generous and tender warmth with which his many friends vied with one another in rendering him substantial help in all the crises of his career.

The arrival of Joseph Priestley in America in 1794, and his frequent presence among the men of science of that day, greatly stimulated scientific studies.

Benjamin Franklin, who had been his friend in England, made strenuous efforts to have Priestley locate in the City of Brotherly Love, but he chose to take up his residence in the small town of Northumberland, Pennsylvania, on the Susquehanna river, where he fitted up a chemical laboratory. Extensive efforts were made, with some success, to found a university at Northumberland, of which Doctor Priestley was to be president.

There is preserved an interesting bit of correspondence between Dr. Benjamin Rush and Dr. Joseph Priestley in reference to the chair of chemistry in the University of Pennsylvania. In the minutes of the trustees of the university is a record of November 11, 1794, which states that Dr. Joseph Priestley was unanimously elected professor of chemistry. For personal and family reasons he felt compelled to decline this honor, to which he refers in a subsequent letter to Dr. Benjamin Rush, but he attended frequent meetings in Philadelphia, and delivered several short courses of special lectures, so that he contributed

extensively to the literature of the period, and filled an important place in developing the science of chemistry in this country.

During his ten years of residence in this country he was in charge of a small Unitarian church in Northumberland. He died on February 6, 1804, from the effects of a chronic digestive disorder, at the age of seventy years. He was born March 24, 1733.

On the 25th of January, a few days before his death, he wrote the following to Dr. Logan: "By means of various illnesses I am reduced to a state of extreme debility; and if the swelling that began in my feet, which has now reached my knees, should continue to advance as it has done, my continuance here can not be long. But I have lived a little beyond the usual term of human life, and am content and thankful. Few persons, I believe, have enjoyed life more than I have done.

"Tell Mr. Jefferson that I think myself happy to have lived so long under his excellent administration, and that I have a prospects of dying in it. It is, I am confident, the best on the face of the earth, and yet, I hope to rise to something more excellent still."

His theological and miscellaneous works and memoirs and correspondence were collected and edited by John T. Rutt, the former in twenty-six volumes (London 1817-32), the latter in two volumes (*ib.* 1831-32). The edition contains over one hundred and thirty separate works, varying in size from short pamphlets to four volume treatises, and the subjects treated of covered almost the whole ground of human knowledge and speculation.

The best estimate of Dr. Joseph Priestley is given in the address of Thomas Huxley delivered at the presentation of the statue of Priestley to the town of Birmingham on the first of August, 1874, the hundredth anniversary of the discovery of oxygen. In his closing he states: "If the nineteenth century is other and better than the eighteenth, it is in great measure to him and such men as he that we owe the change. If the twentieth century is to be better than the nineteenth, it will be because there are men among us who walk in Priestley's footsteps. Such men are not those whom their own generation delight to honor, such men in fact rarely trouble themselves about honor; but ask in another spirit than Falstaff's, "What is honor? Who hath it? He that died o'Wednesday"?

"But whether Priestley's lot be theirs, and a future generation in justice and in gratitude, set up their statues; or whether their names and fame are blotted out from remembrance, their work will live as long as time endures."

It was my privilege to enjoy a recent visit to Northumberland among the kinsfolk of Doctor Priestley, to be in the home built by Dr. Joseph Priestley in 1794 on the banks of the beautiful Susquehanna, where he lived during his ten years residence in this country. Here he died in 1804, and in a nearby cemetery is his grave.

Through the courtesy of the daughters of Joseph T. Priestley, M.D., great grandson of the above, who lived in Northumberland, 1819 to 1883, many interesting mementoes of Dr. Joseph Priestley were permitted to be examined. Here is preserved the old microscope with single lens, microscopic slides mounted in peculiar bone-

frames, each containing a series of five or six preparations; his old telescope, and of particular interest, the magic lantern with colored slides mounted in series of six or eight in wooden frames, crude but artistic, and mostly scenes of home life, which were used for the entertainment of the children of the family at Christmas and other special days.

Most of the chemical apparatus used by Dr. Priestley is preserved in the museum of the University of Pennsylvania and the Smithsonian Institute at Washington.

It was a privilege to see and examine the original manuscript of his autobiography written in 1795; also his signet ring; further, a medal with portrait and wedgewood likeness of Dr. Benjamin Franklin, both being personal gifts.

In this home is kept the portrait painted by Stuart, from a copy of which the accompanying plate has been prepared.

Among these many relics of Priestley is a memorial album presented by the chemists of America, while in session in Northumberland at the centennial of the discovery of oxygen, August 1, 1874, which contains the photographs and autographs of all chemists present. On the last page is a copy of the resolution "that this album be presented to the family in memory of the distinguished ancestor, and that it be preserved until the next centennial August 1, 1974, when the chemists of America are again to meet in Northumberland."

Across the way is the house in which our Dr. James Taggart Priestley was born, spent his boyhood and subsequently studied medicine under

the preceptorship of his uncle Dr. Joseph T. Priestley.

James Taggart Priestley was the son of Marks John Biddle Priestley (1823-1898), a great grandson of Dr. Joseph Priestley.

I met several gentlemen who were playmates of James Taggart Priestley and heard the usual reminiscent tales connected with those who have attained greatness.

The physicians in the generations following Joseph Priestley in this country seem all to have been closely affiliated with the University of Pennsylvania. As mentioned before, Joseph Priestley was offered the chair of chemistry in 1794. Dr. Joseph T. Priestley, a great grandson, graduated from the University of Pennsylvania in 1844, subsequently studied in Paris and then located in Northumberland, and later became the preceptor of James Taggart Priestley, who graduated in 1874; then his son Crayke S. Priestley left the same institution twenty years later in 1894, whose untimely death in 1904, on the threshold of a useful and most promising career, brought such keen regret.

Sir William O. Priestley (1829-1900), the English obstetrician and pupil of Simpson, who was the discovered of the anesthetic properties of chloroform, was a grandnephew of Dr. Joseph Priestley.

Dr. James Taggart Priestley has been a member of the Iowa profession during forty years, and it will be difficult for one person to present a comprehensive appreciation of his active career. It is needless to say that to have known Priestley for half that period has been one of life's privileges, and in another sense a liberal education. It

has taught that we live largely by precept and example, and by the influence of personality in its molding impress on character.

In the history of all successful careers there is usually a period of struggle, and that of Doctor Priestley has not been an exception, yet with his ability, training, hard work, and devotion to high ideals, he has come to a place of highest regard in his profession. One of the interesting stories that has come down from the early period of Priestley's medical life is told by Dr. Addison C. Page about his father and Dr. Priestley who were associates. When the outlook seemed most discouraging, a Northwestern Railway accident yielded a fee of fifty dollars to each, which they promptly spent in each purchasing a horse. From this incident dated the success of both.

If the special characteristics of Priestley are recalled all will agree that the striking feature is his versatility. The rare faculty of adapting himself to all conditions in every circle, lay or professional, cultured or illiterate, is his; he easily dominates by the charm of his personality. Travel has been his hobby, and there are probably very few regions of the globe, open to the traveler, with which he is not familiar. His knowledge of human nature and broad culture have been strong elements in his development as consultant and physician.

He always has entered into the medical life of his city and state with great interest and influence. In 1903 he was honored by the presidency of the State Society. There are few who enjoy a wider acquaintance at meetings of the American Medical Association. He served the section of practice of medicine as secretary in 1896-97, and from

1894-1900 he was on the board of trustees of the association, being instrumental in framing the articles of incorporation under its present plan of organization.

As a teacher he is a clear and forceful lecturer, and the practical hints in his clinical talks are a distinct feature of his discussions at medical conferences.

Doctor Priestley has had an unusual opportunity in developing the medical service of life insurance companies, and the present high plane of this department is largely due to him.

He has made his impress on medical colleagues, and above all he has taught Des Moines physicians the value of promptness in meeting appointments. When Dr. Priestley makes an appointment at eight-fifteen, it requires no timepiece to determine if the meeting is on time.

The cordial fraternal spirit that prevails in the medical profession of Des Moines and delightful "*esprit de corps*" among fellow workers, is in large measure due to Doctor Priestley. His handling of anecdote and story has charmed many an audience, and his rare quality of fellowship have endeared him to a host of friends.

During the years that Doctor Priestley has practiced in Des Moines, medicine has made perhaps the greatest strides in its history, and although he, as he says, "has seen all of them come, and most of them go", yet, he has ever been in the forefront, and we are glad today to acknowledge him the most progressive among us. In this spirit, The Festschrift is offered to James Taggart Priestley as a testimony of the love and esteem of his fellows.

—WALTER LAWRENCE BIERRING.

MAJOR WALTER REED AND YELLOW FEVER

D. S. FAIRCHILD, M.D., Clinton

In February, 1900, The Pan-American Medical Congress met at Havana, in the University of Havana buildings. It was at this time that Major Walter Reed presented a detailed account of his work in the study of yellow fever.

Yellow fever was a disease dreaded and feared in all the Gulf ports and the lines of communication beyond. It was a disease that arrested the construction of the Panama Canal and made traffic and commerce with tropical countries hazardous. There were men who believed that the cause of the disease could be found out and that the disease could be controlled. Surgeon General Sternberg believed it. Dr. Carlos Finlay of Havana believed it, and there were others. It was almost discovered, but there were a few links missing and those must be supplied, but it was more than one man could do to find them and so a group was formed, consisting of Major Walter Reed of the United States army, contract surgeons, Dr. James Carroll, Dr. Jesse W. Lazear and Dr. Aristides Agramonte.

It was understood that Major Reed would present a full and detailed account of the work and how it came about that it was known definitely that the disease could be prevented by simple and certain methods. Therefore a group of American doctors were sufficiently interested to make the trip to Havana to celebrate one of the great discoveries in medical science. (We herewith present a group picture of the American delegates.)

Major Reed read an extended report of the investigations in the auditorium of the University of Havana, to a rather small audience. The report was first read in English and then in Spanish. The writer had some intimation of the general character of the report, but was not prepared for the profound impression it had on his mind as he listened to each word as it came from the lips of the reader. Two hours were occupied; it seemed only so many minutes. Major Reed told how Lieutenants Carroll, Lazear and Agramonte offered themselves as subjects for the experiments, offering themselves to be bitten by known yellow fever carriers and to almost certain death. There was little hope of escape from the disease; the only hope was the possible recovery from a disease from which they were not in any degree immune. The details of the investigation are of record and we shall not attempt to relate them, only the impression it bore on the mind as we were told, how the officer extended his bared arm through the wall of the building, silently inviting the death dealing mosquito to discharge the yellow fever germs into the unprotected flesh. How another passed a silent night in a closed room among the soiled clothing and vomit saturated linen from one dead of yellow fever, without knowing what might happen—but did afterwards know he was safe. We listened to the hiring of human subjects for this dangerous work of finding out about yellow fever, although not so dangerous to partly immune natives, not all recovered. It was easy to picture a drama from the solemn words of a master investigator.

For two hours we listened with profound attention to a relation of facts that were to revolu-



American Delegates to Pan-American Medical Congress at Havana, February, 1900.

tionize commerce with tropical America and add millions to the wealth of America, at an expense to the few who were willing to sacrifice their lives for the welfare of mankind. No one now fears to visit the West Indies, when formerly only the most hardy had the courage to visit and trade among these frequently stricken people. But who now think of these heroes? Indeed, their names are almost forgotten; far different is it of those who sacrificed their lives in military adventure. As the writer, while waiting on ship-board for the loading of the last bags of sugar, wondered if it was indeed true, that the fumigation of ships and cargoes against yellow fever was at an end, and the expensive and trade disturbing quarantine would never again be necessary. This thought as I looked from the deck railing to the last bag, coupled with Major Reed's words, left an impression that has never departed from my mind.

How the world in its hurry forgets how things came to pass! We are filled with admiration at the thought of the magnificent Walter Reed Military Hospital in Washington, but what else? Dr. Jesse Lazear died of yellow fever in his endeavor to find the facts, Dr. Carroll recovered from the disease and died soon after, leaving a large and destitute family, and a considerable mortgage on his modest home.

Not so many years ago word came to Atlantic City, where the American Medical Association was in session, that Dr. Carroll's family was to be evicted from their home in Washington, because they could not satisfy the mortgage. In a few minutes, only, was a sufficient sum of money raised to pay off the mortgage and a little more. With the usual delay, Congress voted a small

pension to Mrs. Carroll. Only a few years ago we learned that Lieutenant Carroll's mother died in a charity ward in a Washington hospital. The great commercial world which was so directly benefited by the yellow fever group has wholly forgotten these men.

At the present moment the medical world is asked to contribute considerable sums to establish and endow a Gorgas Memorial as a School of Tropical Medicine, an institution of almost incalculable benefit to the civilized world, and to the glory of the medical profession. But when we think of the immense value of this memorial to the commercial world which seeks great financial advantages in the tropics, we are amazed that these interests do not at once assume the financial burden. We must give great credit to the United Fruit Company for the work they are doing in eliminating diseases from the tropics through a large group of trained medical officers at their various stations. Praise must be given to the Rockefeller Foundation in their work of eliminating disease and the improvement in the conditions of living among people forgotten until the yellow fever investigations and the application of Surgeon General Gorgas.

As I think of it now, who could at the time I have referred to, measure the great things that were to happen in tropical America, and it is with profound thankfulness that it has been given to us to bear witness to these great things. Twenty-five years have passed since our little group of delegates witnessed in Havana the beginning of a great epoch in tropical and preventative medicine, and we may ask, what may another generation witness?

HISTORY OF MEDICINE IN IOWA

DR. CHAS. M. ROBERTSON

The history of the Robertson family constitutes the most interesting chapter of Iowa medicine. Dr. J. M. Robertson came to the Iowa Territory and located in Burlington in 1838. In 1852 his son, W. S. Robertson, entered his father's office and together they practiced medicine until Dr. W. S. Robertson's death in January, 1887, a period of nearly fifty years. Dr. J. M. Robertson had practiced nearly ten years when he came to Iowa and the two generations had covered a period of sixty years. Thus from the standpoint of the practice of medicine, the only change was the growing experience of additional years. Typhoid fever was typhoid, malaria was malaria, and so on. There was, of course, the increasing skill in application of standard remedies, physical injuries, including fractures and dislocations, were treated in accordance with standard methods of increasing skill, but the time was near at hand when this would all be changed. It would not be merely the increased skill in application, but the involvement of new thought and new ideas which would have their inception with the third generation of the Robertson family.

In 1888, when Dr. Chas. M. Robertson, representative of the third generation, entered upon the field of medicine, scientific methods had been well introduced, sufficiently so to have become a partly established routine of medical practice, but typhoid fever was yet to undergo changes as to a knowledge of origin and develop-

ment, malarial fever was to change from the standpoint of transmission and treatment, and many other diseases were to pass from the standard treatments of the two generations to a complete and definite knowledge of scientific cause and sequence under the eye of Dr. Chas. M. Robertson. The methods of treatment of the prevalent diseases of the first two generations were to be continued, but the control and management was to be completely changed, and so in the third generation we have an almost complete revolution in the management of disease. To make the story complete from a medical point of view it is necessary to consider the evolutionary changes which have taken place under the eye of Dr. Chas. M. Robertson during the period of thirty years or more.

It is to be borne in mind that the fifty years we have been considering under the eye of two generations of Robertsons was the standard medical management of disease of the Mississippi Valley of that period, but there is much more to be said: the building of the state, the building of roads, homes, farms, villages and methods of local government, and many other things. Drs. J. M. and W. S. Robertson were not merely witnesses to the transition of fifty years, but were active participants; none contributed more, none made greater sacrifices; these men were not silent actors in contributing to the welfare of the sick and afflicted, but the active workers in the great upbuilding process.

Dr. Chas. M. Robertson was born at Columbus City, February 1, 1865. In 1869 his parents moved to Muscatine, where he received his



DR. CHARLES M. ROBERTSON

school and high school education. In September, 1882, Dr. Robertson entered the State University at Iowa City, in the scientific course, graduating B.S. in 1885. In March, 1888, he graduated in medicine and in June received his M.A. degree; practiced medicine in Muscatine for a year and then became an assistant to Dr. C. M. Hobby, head of department of eye, ear, nose and throat at Iowa City. In 1891-92 studied under the masters in department of eye, ear, nose and throat in Vienna, Paris and London. On returning home Dr. Robertson settled in Davenport, where he practiced his specialty until he was elected professor ear, nose and throat in Chicago Polyclinic in April, 1901. While still practicing in Davenport he was appointed chief oculist and aurist of the Rock Island Railway Company in 1892, serving in that capacity for nine years. While still in the academic department of the State University Dr. Robertson was Adjutant of University Battalion. On August 1, 1890, was appointed major surgeon of the Second Regiment of Iowa National Guard, which was mustered into the service as the 50th U. S. Volunteers, serving as major surgeon; served with the 30th U. S. Volunteers until July, when he received an appointment as chief surgeon of volunteers with a rank of division major. Resigned from army September 1, 1898, on account of typhoid fever. Was elected professor of ear, nose and throat in State University in 1894 and served until he moved to Chicago in 1901.

As already stated, Dr. Robertson was elected professor ear, nose and throat in Chicago Polyclinic, April, 1901, which position he has held continuously until the present time and has

served as a trustee for ten years, and treasurer for six years.

In 1906 he was elected associate professor in otology in Northwestern University, which position he held until 1912. Was appointed collaborator on the International Archives of Oto-laryngology of France in 1908 and served in that capacity until the World War in 1914. At present is abstractor for the Archives of American Oto-laryngology for French and Spanish.

Dr. Robertson is a member of the A. M. A.; Illinois Medical Society; Chicago Medical Society; Chicago Ophthalmic, Chicago Laryngologic; American Otologic; American Otologic, Rhinologic and Laryngologic; American Academy of Ophthalmol, Rhinolog, Otolog and Laryngol; charter member of the Military Surgeons of the U. S.. During the World War was captain of M.C.U.S.A., doing research for the government on the medical aspect of aviation.

Is a member of the staff of the Henrotin Memorial Hospital, Polyclinic Hospital, Alexian Brothers Hospital, Highland Park Hospital, Waukegan Memorial Hospital, (president of staff).

Was married June, 1915, to Mary Van Houton of Eagle Pass, Texas, by whom there were three daughters born, Anita, Martha and Mary Moore, fifteen months old. Lives at Highland Park, Chicago.

The Iowa Medical Profession in the Great War

Edited by
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Clinton

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THE IOWA MEDICAL PROFESSION IN THE GREAT WAR

The medical profession of Iowa furnished 835 medical officers for the war in many lines of service, in many camps in the United States, in many overseas camps and in combat service, with credit to the state, with honor to the profession and many with great personal distinction which has been recognized by the War Department and by the Nation. It has been the purpose of this Journal to follow the activities of the Iowa medical officers as far as possible not so much in the way of extoling the individual merits, as in showing how by cooperation of the different medical units a condition of service was obtained that practically eliminated the ordinary infectious diseases that has so often in the past followed armies in the field and rendered so many soldiers unfit. We are also able to point with pride and satisfaction to the skill with which wounded men were evacuated to dressing stations and hospitals notwithstanding the inadequate provision which our unpreparedness compelled us to rely upon. We shall begin our account of Iowa medical officers in the war with an introductory abstract from the medical history of the 42nd Division (Rainbow) and the medical history of the 168th Regiment (Iowa) which with the 167th Regiment (Alabama) rendered the most distinguished services of the war.

“The purpose of this paper is to relate experiences of the Medical Detachments of the 42nd Division in such a way that the future may profit from the past. And, with this in mind, it seems

only fair that we discuss, first, in a brief way, the personnel of these detachments, for the credit that redounds to the medical department of the front line must go to those brave lads whose magnificent courage and intelligence made possible the efficient care of the wounded under most adverse conditions.

“In the service of the state from which these medical detachments came, as a part of that particular infantry, artillery or engineer unit which went to make up the Rainbow Division, there was a peculiar attraction about the medical branch of the service that drew to it, for enlistment, men of the highest type. In fact, it was possible for the commanding officers to take only the cream, as it were, of the preferred enlistments. This apparently had been done without exception with the result that these medical detachments were made up of men who were peculiarly fitted by temperament and physique for the work that they were later to do.

“In one detachment, of which the writer has intimate knowledge (and there is no reason to suppose that this detachment was other than an average one of the whole Division), the percentage of men who had a grade school education was 100, the graduates of a high school were 90 per cent. of the total and the percentage of those who had had some college training was 80. In addition, almost half of these men had acquired some little medical or surgical training in civil life. In sharp contrast to this type of men, were the poorly chosen replacements that came to the Division on several occasions—an appreciable percentage of whom were illiterate, with little practical experience in life, and some of whom could not speak

the English language intelligently. Though the work of these men, in most instances, was creditable, it was obviously hampered.

“The fact that an organization has in it a certain number of college men, a given number of trained men, a proportion of men who are physically strong, does not, perhaps, insure its efficiency, but the fact is submitted that where these qualities, as have been suggested, have been possessed, the result has been most gratifying. The medical detachment man is more often thrown on his own resources than the man of any other branch, when, on his exhibition of courage, intelligence and endurance, depends the safety and life of others, and it is with this fact in mind that the plea is made for the man of these qualities.

“Equipment, too, has played a prominent part in the successful functioning of the medical detachments, as it has with every other branch of the service. The various types of warfare brought about a development of combat equipment. This development includes improvements, modifications, reductions and the addition of many new articles and types. As in other branches of service, problems were met at every turn and, while many of them were to be solved when encountered, yet foresight enabled the medical department to handle many emergencies with credit. Both the English and the French contributed to our medical needs and schooled our officers in their methods, but no perfect equipment or set of rules was provided in advance for the successive campaigns and, after all, experience proved the greatest factor in perfecting and balancing this important item. Transportation, too, effected

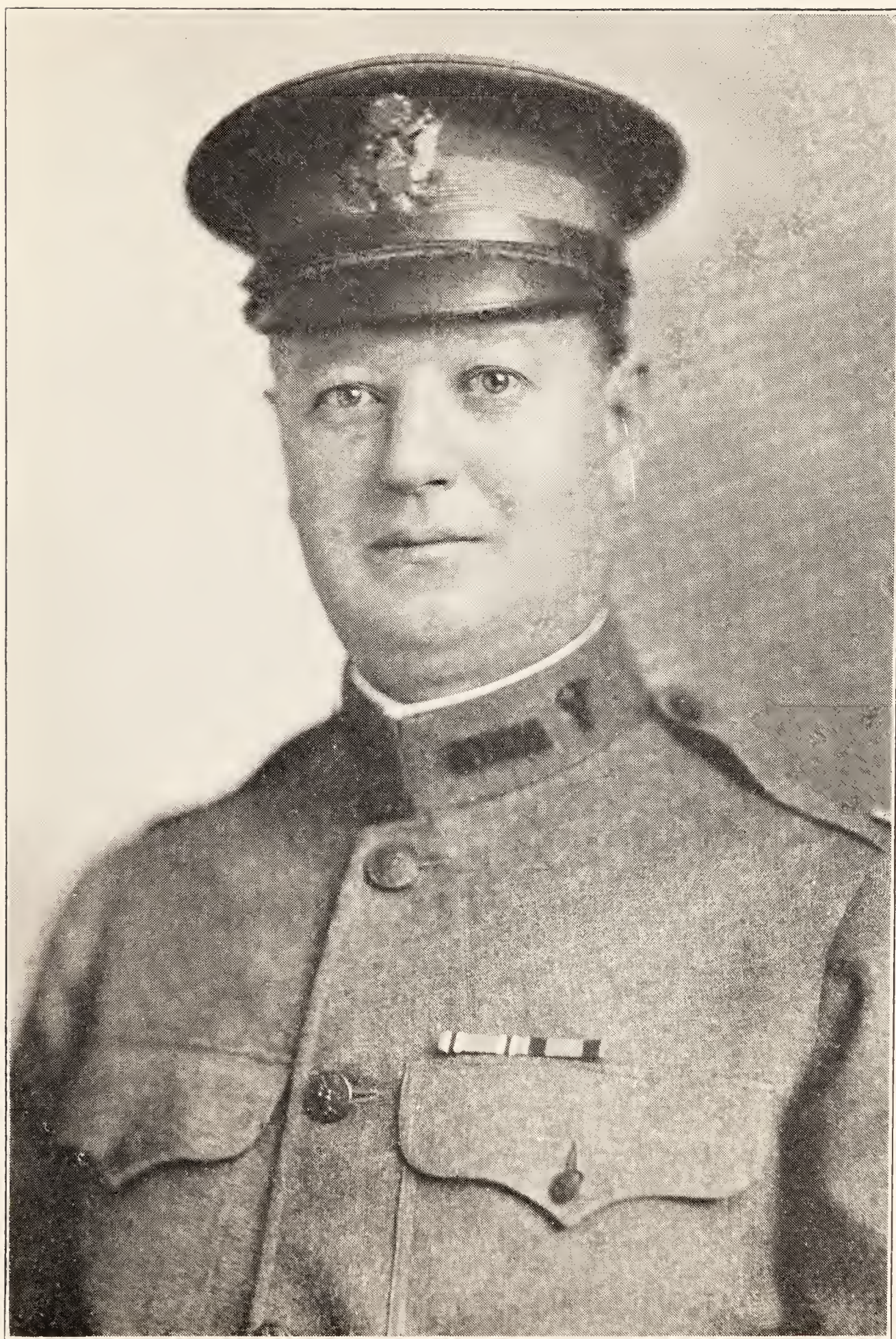
equipment in no small degree, especially in the last months of the war."

MEDICAL SERVICE OF THE 168TH INFANTRY

1. Baccarat Area—The medical service on a stationary, and more or less quiet front consists mainly of sanitation and prevention of disease, rather than the evacuation of wounded. Consequently, the details of litter-bearing, getting the wounded from the field to the aid station, were not very thoroughly worked out during the first few weeks in this sector. This made very little difference in the service, on account of the nature of the action, which consisted wholly of patrolling and raids, and when the affair was over, the soldier laid down his rifle, took hold of a litter and helped bring his wounded comrade in. And how well they did this is evident by the remarkably swift time of evacuation established in this area.

Major Conkling, the regimental surgeon was away at school when we first entered the trenches, and the sanitary detachment was under command of Capt. Wm. B. Hudson. The 1st Battalion took the trenches in front of Badonviller, with Lieut. Harris and Lieut. Williams as surgeons. The aid station was in Badonviller, and about fifteen hundred yards from the farthest outpost of our troops. The enlisted personnel consisted of a sergeant, a pharmacist, a clerk and ten first aid men. Two of the latter were detailed with each of the two companies in the front line trenches. They had with them litters, splints and a plentiful supply of dressings.

All of the trenches in this area were narrow, and had many sharp angles, so it was apparent



LIEUT-COLONEL W. S. CONKLING
Surgeon 168th Regiment, Director Field Hospital,
Director Sanitary Train

from the start that all evacuations must be over the top and without cover. The support battalion was at Pexonne, and the Regimental Infantry was set up there, approximately two kilometers from Badonviller. The reserve battalion infirmary was located at Neuf Maison, and the sanitary personnel moved from one location to the other, keeping with its battalion. The medical equipment was left permanently at each infirmary, and checked by the surgeons at each relief.

The ambulance came to the very door of the battalion aid stations, and when a wound was dressed, the patient was very shortly on his way to the hospital. There was one casualty prior to March 5, 1918, this being a slight wound in the back, suffered by a member of D Company who received a Croix de Guerre for shedding the first American blood in this area. On March 5 we had our first taste of war, withstanding a very severe bombardment which lasted about an hour and a half. The fire was directed almost entirely on the front line trenches, and there the havoc wrought, appeared to our untried eyes and nerves, to be terrific. There were about forty wounded, most of them severely, as is usually the case in shell fire. In an hour and a half after the shelling ceased, the first of the wounded were in the aid station at Badonviller; they had been dressed in the trenches, and carried a distance of one kilometer over a terrain torn by shells, and criss-crossed with trenches and barbed wire.

Not one of the wounded was brought in without a first aid dressing applied, and all fractures were splinted in the trenches, before putting the patient on a litter. When our front was lengthened on April 1, we took over an ideal dressing

station at Village Nigre. This was a huge dug-out, which the French troops had completed after two years of hard work. There were quarters for the men, an infirmary containing eight bunks, and the dressing station proper. This had an entry into a receiving room which held eight litters, then a passage leading to the dressing room. From the dressing room another passageway gave access to a waiting room where an ambulance load of wounded were collected, and then taken directly out by a "sortie" to the ambulance, which came within a few yards of the door. This was only half of the station, the other end being used for walking patients, and not being divided into rooms, could accommodate about two hundred persons. The entire dug-out was lighted by electricity; there were four doors and ten windows, all equipped with gas curtains. Pine trees had been set out all over the dug-out, and a small, but well kept flower garden appeared in front.

The equipment kept in the aid stations here was very extensive; but as yet we had seen no reason for cutting it down. The period from April 1 to the middle of May was mainly devoted to sanitation. This was in charge of Capt. Bunch, who joined the regiment early in April, and from the time of his coming, the smoke of incinerators never ceased. Latrines were dug, and urinals established and in one part of our front when it was impossible to dig on account of water, bucket latrines were put in, and a man from each platoon put in charge of the sanitary work.

In May occurred our epidemic of influenza, the so-called "three day fever," which appeared to be identical with the epidemic of influenza which

was then raging in various places on the Continent, and in England. Ninety per cent. of the command suffered from the disease but there were no fatalities. Evacuation to the hospital ran up to 50 and 60 per cent. A sergeant of H Company reported to the infirmary one evening with a temperature of 102 degrees F. When told that he should go to the hospital, he admitted that he was willing, but had to go back to his post in G. C. 9 and get his equipment. He failed to return promptly, and a runner was sent out to bring him in; then it was discovered that he had gone out on a patrol, possibly thinking that was a good way to cool his fever. It worked out, for the next morning he appeared with a normal temperature, and feeling fine. Many of these men, however, were desperately sick, and did not recover for weeks.

On May 27 we suffered under the most deadly of all offensive measures. A projector gas attack which fell principally on village Nigre and took a fearful toll from the companies stationed there; A, C, and Machine Gun. A projector attack must be experienced to be appreciated. The stupendous noise of bursting containers is so unearthly as to be almost paralyzing and the gas is of such concentration and so all-pervading that the least hesitation means death, or at the very least, incapacitation for a varying period. There is only one defense, but that is absolute: namely, the gas mask, instantly adjusted and left in place until the gas has dispersed. In addition, work should cease, unless absolutely necessary. Many men on the morning of May 27 worked violently at litter bearing, and persisted in it after being

ordered to stop, until they, themselves made the ultimate sacrifice.

On May 29th the attack was repeated, but our dearly bought experience had been taken advantage of, and there were but two casualties, and they were unavoidable. The gas used in these two instances was a mixture of phosgene, and chlorene, with the phosgene much in excess. It is a very deadly combination, one full breath of the heavy concentration at the beginning of the attack being sufficient to cause death. The first week in June, Major Conkling was transferred to the divisional medical staff, and Captain Bunch became regimental surgeon, which position he held continuously from that time on.

On June 17 we had our first experience with mustard gas. During a general bombardment of the area, numerous mustard gas shells were thrown into Badonviller. A recommendation was at once made that the portions of the village rendered dangerous by reason of the gas be evacuated temporarily. This was not done, and the following day the ambulances were kept busy evacuating the casualties. The shelling having occurred in the evening, and in conjunction with a bombardment by high explosives, it was impossible to locate all of the gas shell holes, and many men unwitting went to sleep in their quarters and were casualties by morning from the slow emanation of gas from unsuspected shell holes close at hand. The following night the Division was relieved and sent to the Champagne.

2. In the Champagne we found ourselves in an active sector. The aid stations were in trenches, with no dug-out nearby, and no cover for either wounded or sanitary personnel. Here

for the first time, litter bearers were authorized, and they had one day of training in their work before the storm broke out on July 15. But all stations were accessible to ambulances, and the first load of patients was on its way to the hospital in an hour after the shelling started. Here we learned that the combat equipment for a battalion could only consist of such material as the medical personnel could carry, as the battalion moved from place to place. Here, also, three men of the sanitary detachment with the third battalion were recommended for the D. S. C. by the company commanders of that battalion.

In Lorraine, the deepest dug-out was none too safe. In Champagne, even a trench two feet deep, such as the second battalion infirmary occupied, was a God-send. The evacuations were carried on regularly, and with no hold up, from all three aid stations, as long as ambulances were available. After eight o'clock on the morning of the 15th, we had more or less trouble getting the patients to the rear. But they were finally cleared up by evening of that day. And although we remained in that position for several more days, there were no casualties.

3. At the beginning of the counter offensive in the Chateau Thierry region we were at once relieved and sent to that area. Here we found a different problem. Open warfare, in a wooded region without roads, and most vital of all, no maps. Prompt cooperation from the Regimental Commander insured an extra detail of litter bearers, and enabled us to get the wounded to the aid stations in very good time. But as the heaviest casualties occurred in the neighborhood of Red Cross Farm, and just at dark, this field was not

cleared until the following morning. No horse ambulances were available, but an escort wagon with two mules did wonderful work in this region. It was more than a kilometer from the front line to the nearest aid station where work could be carried on at night. And as we had had two days of rain, the paths in the woods were little canals of mud. The litter bearers here had a heart breaking task, and there was not one who did not deserve a decoration. The night following the action at Red Cross Farm, the regiment moved forward through the woods, several kilometers, taking up a position to attack across the Ourq river at dawn.

The battalion aid stations were moved with the troops, the men carrying all the equipment, and being established in position when the attack began the next morning. Soon the wounded were pouring in, but no ambulances were there to take them to the rear. We had the unfortunate experience of seeing hundreds of patients lying in our several stations, some for more than eight hours, some even twelve, before they were moved. Three S. S. U. ambulances attached to our regiment made trip after trip that day, but could not make an impression on the ever increasing number of casualties. Three ammunition trucks took fifty gassed and wounded patients from Lieut. Harris stationed at La Cense Farm, and notably relieved the congestion there. And finally a train of ambulances was secured from the Division on our right, and we evacuated all of our seriously wounded shortly after midnight. On this front we ran two aid stations. One, near the firing line, handled litter cases, and two squads of ambulance litter bearers were stationed there, as it

was not accessible to motor vehicles. The other station served as a gathering point for all wounded, and being in plain sight of the entire field, drew walking wounded from all directions.

On the afternoon of the second day on the Ourcq, Lieut. Williams and Lieut. Green were wounded in their station at La Monte farm. Both of our stations here were under direct observation, as well as the path connecting them. Consequently the casualties among litter bearers were very high. And as the line advanced through Sergy and on to the hills beyond, it became increasingly difficult to get the wounded back. A good, but very dangerous road ran from Sergy, to the rear, right past our rear station, and six Ford trucks from the 149th Machine Gun Battalion took up the task of evacuating the village. Trip after trip was made, and each was a race with death; vicious Whiz-bangs and heavier Howitzers marking the trail of each little car with curling bursts of the dense black smoke of high explosive. Most of the patients were covered with dust and dirt from the shells that hurried the truck on its way. And each driver profanely ridiculed the attempts of the enemy gunners to make the way impassible.

After replacements were received, a new detail of litter bearers was secured, and these were given several days of instruction in applying the first aid packet, and handling litters and wounded men.

4. At St. Mihiel we were better able to plan our work, as the operation was from an old prepared position. The aid station of the attacking battalion, was just in front of the jump off in an abandoned strong point. The station of the sup-

port was about three hundred yards in the rear of this, and the reserve station was on the road, about six hundred yards in the rear of the latter, or nine hundred yards from the advanced station. Motor ambulance could not traverse this last distance. It was necessary to bring seriously wounded to the road by stretcher bearers, but slightly wounded, unable to walk, were transported by horse ambulance. As our rear station was the loading point of the motor ambulances, it was necessary to maintain it until the field was cleared. The support station however, moved forward as soon as the enemy's line was broken, and followed the advancing line closely. Practically all casualties occurred in the first two hours of the attack, so the wounded were all evacuated from our original positions. This was very fortunate as it would have been almost impossible to evacuate across the area comprised in the old battle lines. The roads across the old "No Mans Land" were hastily reconstructed, and sustained an unceasing stream of traffic for forty-eight hours after the lines moved forward, but this traffic was of necessity all moving forward, and vehicles going towards the rear had little chance of getting through.

The army objective was reached at ten o'clock in the morning of the second day, and at eleven o'clock we had one motor and one horse ambulance at the aid station just behind the front line. The advance station was located in Louisville farm. The road leading to it, as well as the farm itself, was under direct observation from the enemy lines, but was just out of machine gun range. The support and reserve stations were with their respective battalions, and three kilo-

meters behind the outpost line. We remained two weeks in this sector, getting latrines, urinals and refuse pits established, and were transferred to the Argonne region. The entire Division camped in the woods just before Montfaucon for several days. This camp was behind the German lines as they were prior to September 26th, and the area had been under shell fire for the entire period of the war. A more devastated region would be hard to imagine. Branchless trunks of trees represented what had been once a forest, and each soldier had for his home, an individual shell hole. Here the first rumors of peace began to come, and over-enthusiastic dough boys were shouting in concert every few minutes, day and night when particularly pleasing ideas occurred to them.

5. Shortly orders to move came, and we moved to the left of Montfaucon, on a road continually jammed with ration and ammunition trucks, ambulances, artillery and practically everything that goes on wheels. The march was particularly exasperating because the road was being intermittently shelled with H. E. and shrapnel. Under such conditions, most anyone has an almost uncontrollable desire to move right along and perhaps establish a new country record over the said bit of highway. Finally some eight inch, tractor drawn rifles, a couple of ration trucks and three caissons met the head of our column, and almost immediately afterwards, three shrapnel bursts right in the road, and settled all questions of right of way, and traffic speeded up considerably. The wounded were taken into a barn nearby and dressed. Ambulances appeared at day break. The regiment rested that day, and

relieved the 28th Infantry that night. The following day was spent in reconnoitering and brought a further change of position to the right before Hill 288 where the action started on October 14th.

It was four kilometers from this position to a road; and this four kilometers was through a valley, ankle deep in mud. All communications from the Brigade sector to the rear was by this valley, and it was under nearly constant fire. Two squads of ambulance litter bearers were with the advanced aid station. They carried patients to the support aid station, about one and a half kilometers towards the rear. Here the horse ambulances could operate, and did operate, but were not sufficient to evacuate all the wounded, many of whom were borne back by the stretcher bearers the entire four kilometers.

The aid station here was in a "fox hole" for two days. Then an abandoned hut was found, which when covered with a tarpaulin, gave good protection from the rain, and made it possible to work at night. The advance on hill 288 began about seven in the morning. At noon the leading elements had passed over the crest, and the medical personnel moved to the top of the hill, with battalion headquarters. This position soon came in for a heavy shelling by enemy howitzer, and Sergeant Burke, Pharmacist Bongers and Clerk Aschan of the sanitary detachment were all wounded by fragments from one shell. Two days later the Cote de Chattillon was taken, and ambulances could then come at night to within a few yards of the aid stations. The work in this area was probably the most severe test the medical department had during the war. The regiment

was soon relieved here, and got a week's rest before entering the final campaign. The initial attack on the new line was on November 1 and on November 2 we marched out of our billets and followed the advancing 77th and 78th Divisions. On November 5 we took over a sector just north of St. Piermont and at midnight of the 6th our troops were overlooking the Meuse river just above Sedan. During this advance no aid stations were set up, the medical personnel moving right along at the rear of the battalion, and carrying all equipment. There were three casualties during the 5th and 6th; two from shell fire and one from a machine gun bullet. The men suffered a great deal from exposure and lack of food, and consequently many sick were evacuated. We were relieved from this front on November 9th and had moved back to Briquenay when the armistice was signed.

HOSPITALS OF THE 42ND DIVISION

Neuenahr, Germany, March 5, 1919

Pursuant to war department instructions covering the formation of the 42nd Division, and the assembling of its various component units, preparatory to its embarkation for overseas service, August 15, 1917, found the Field Hospital Section, 117th Sanitary Train, represented at Camp Mills, Garden City, Long Island, N. Y., by its first contingent, Field Hospital Company, No. 165, formerly Field Hospital Company No. 1, National Guard, Oregon. On September 8, Field Hospital Company, No. 166, formerly Field Hospital Company No. 1, National Guard, Nebraska, arrived, and with the arrival of Field Hospital Company, No. 168, formerly, Field Hospital Company, No. 1, National Guard, Colorado, on September 12, the section was completed.

Major Charles O. Boswell, assumed command of the section as director of field hospitals. Major Herbert Bryson, commanded No. 165, Major John F. Spealman, No. 166, Major James P. Graham, No. 167, and Major Edward W. Lazell, No. 168.

Field Hospital Company No. 165, was instructed to open and conduct the camp hospital, pending the arrival and organization of the permanent personnel designated for that purpose. This was accomplished two weeks later and Field Hospital Company No. 165 was relieved.

The section now entered upon a period of active training and instruction until October 18, 1917, when, with the rest of the Division, it embarked for overseas service.

The trip across the sea, was uneventful, except for Field Hospital Company No. 166 which embarked on the U. S. S. President Grant. Field Hospital Companies, Nos. 165, 166 and 168, arriving at St. Nazaire, France, November 1, 1917. Field Hospital Company No. 166, having proceeded 900 miles to sea, was compelled to return to the United States, which was due to boiler trouble on the ship. On October 29, 1917, they arrived at Overseas Casual Camp, Governors Island, New York and remained at that station until November 1, 1917, when they were ordered to Camp Merritt, New Jersey. The company left Camp Merritt, New Jersey, November 14, 1917 and arrived at Liverpool, England, December 1, 1917. After a stay of ten (10) days at Winchester, England, proceeded to Le Havre, France, via Southampton, arriving December 12, 1917.

The three field hospital companies which arrived in France on November 1, 1917 were assembled at Mauvages, Meuse, on November 8, 1917. Here a hospital was opened and operated, to take care of the divisional sick, by Field Hospital Company No. 168 on November 11, 1917. This was the first hospital to be opened and operated by the 42nd Division in France and is worthy of description. It was located at Mauvages, and was situated on the side of a sparsely timbered hill, overlooking the town, in an old chateau, surrounded by walks, drives and shrubbery, and gave evidence of former splendor, but was now in a state of dilapidation. The building was unoccupied, save for two rooms, used by its present owner, the local cure, who purchased it from the descendants of the original owners. The building, which gave evidence of having once been beauti-

ful and spacious, now showed its age to a considerable degree, and it was no small sanitary problem to transform such environments into a hospital for the care and treatment of the sick. On November 15, 1917, the hospital was transferred to Field Hospital Company No. 167.

Field Hospital Company No. 168, having received orders from the division surgeon's office, located at Vaucouleurs, proceeded to Chalaines, to open and operate a hospital. At this place a site was selected, on which there was an old chateau and several ward buildings, formerly used by the French as a hospital. The chateau was located on a beautiful hillside, overlooking the Meuse river, in a fair state of preservation, and surrounded by a large park, which was once the pride of its former owner. It is now owned by the widow of a French officer, who was killed in 1914 at Mont Sec. Here also, considerable difficulty was experienced in cleaning and preparing the buildings in order that more space might be had for the proper care of the sick and injured.

Field Hospital Company No. 165, established an auxiliary hospital at Burey-en-Baux, on December 6, 1917, just about 1 kilometer below Chalaine.

On December 1, 1917, twelve female nurses from Base Hospital No. 36 were added to the personnel of each of these hospitals, and proved a very valuable adjunct.

At Field Hospital Company No. 168 the first divisional field laboratory in the American Expeditionary Forces was established on November 25, 1917. Here, also the first problems arose and

were mastered and employed for the operation of future field hospitals in this division.

Even at this early date, these hospitals were located near enough to the front to hear the roar of artillery fire.

The first difficulty encountered at this time was that of transportation, and this was vexatious. The divisional transportation had not been issued, and the means of transporting the sick from their organizations to the hospitals and again from there to the rear, was limited to a few, small Ford ambulances, in a very bad condition, for which there were few or no spare parts available. Vittel, France, was the evacuation point, for these hospitals, and it was therefore no small problem to evacuate to that place, a distance of fifty kilometers, with the limited amount of transportation available. During the first part of December, 1917, very cold weather was experienced, and the soldiers not being acclimated, many cases were sent to the hospital, thereby taxing to the utmost the transportation and hospital facilities. During the stay in this area, the patients received at the field hospitals were not battle casualties and consisted mostly of sick, with the following ailments, contagious and infectious diseases, pneumonia and la grippe. These were treated as nearly as possible in the same manner as in private life. A few injured were treated, some with open wound and these we found required much more care and skill than in private life due to the fact that the soldiers were unable to keep their clothes and body in the same condition as at home.

During the stay in this area, several changes oc-

curred in the field hospital section administration. Major Boswell, director, was transferred to the 117th Ammunition Train. Captain Henry F. Sawtelle, assumed command of Field Hospital No. 165, Captain A. J. Campbell, became commanding officer of Field Hospital Company No. 168, November 15, 1917, relieving Major Lazell, who was waiting for orders to proceed to a base hospital as a neurologist.

Preparations were now under way for the march of the division to the 7th Divisional Area, and was begun, December 12, being accomplished in two moves. The first march brought the section, excepting Field Hospital Company No. 166 at St. Blin on December 14, 1917. Here, Field Hospital Company No. 166 joined the section, having arrived from Le Havre, on December 15, 1917, which completed the section with the exception of certain details, who left it at Camp Mill N. Y., for Newport News, to care for the horses and mules, and officers who were at school in Gondrecourt. Nothing, worthy of note, happened on this part of the move, with the exception that we halted long enough in Doremy, to visit the home of Joan D'Arc.

At St. Blin, our first Christmas was passed and one of the most appreciated facts was the arrival of a large number of Christmas packages to the personnel from the United States, producing untold happiness and joy.

Major M. B. McMillan was made director, field hospital section on December 22, 1917. Major Lazell not having received his orders, was again put in command of Field Hospital Company No. 168.

Intensive training took place at St. Blin from December 14, 1917 to December 26, 1917. On December 27, 1917, the march to the 7th Divisional Training Area, was resumed and December 30, 1917, found the entire section at Longeau. The latter part of the march was very strenuous on account of the cold weather, ice, snow and wind.

The officers who were sent to school at Gondrecourt, having finished their courses, returned on December 31, 1917. The section again took up training and remained at this station until January 18, 1918, when it was ordered to Humes, except Field Hospital Company No. 165, which was ordered to Langres to open and operate a camp hospital.

The detail which was left in the United States, to care for the horses and mules of the section, arrived while it was in Humes, on February 12, 1918.

The period of training was completed on February 17, 1917, and on that date the section, less Field Hospital Company No. 165, proceeded to the Luneville Sector, where the Division was to operate in conjunction with the French 164th Division. Field Hospital Company No. 165 remained at Langres.

Just before starting on this march, the English barrack shoe had been issued to the Division, this, we soon found was unsuitable for marching purposes. It produced a large amount of foot trouble, requiring the division orthopedist to suggest modifications in the footgear.

Just before this move, however, the transportation of the various companies was issued. Field

Hospital Companies 165, 166 and 167 receiving motor trucks and Field Hospital Company No. 168 receiving animals and hospital wagons.

Field Hospital Companies Nos. 166 and 167 proceeded overland by truck to Loromontzey, Field Hospital Company No. 168 proceeded by train, unloading at Moyen, arriving at Loromontzey, by forced march, February 19, 1918. During the march, enemy aerial activity was marked and here the train received its first sight of the use of anti-air craft guns. This area had at one time been occupied by the enemy and the awful devastation was firmly impressed on the minds of all who saw it. Many German and French graves were located by the roadside.

The division surgeon's office was located at Luneville and from there orders were issued for the three field hospital companies to proceed to their respective stations, which were as follows: Field Hospital Company No. 166 was sent to Luneville on February 21 to open and operate Auxiliary Hospital No. 21 in conjunction with the French Service Sanitaire, at Chaufontaine, and entirely taking over Hospital No. 102 at Luneville. Field Hospital Company No. 167 was ordered to Luneville on February 25, 1918 and held in reserve. Its personnel, however, was sent in various details to assist Field Hospital Company No. 166 as the increased activities on that front sent a correspondingly increased number of casualties.

A surgical policy was pursued which was a modification of both the French and British systems of treating war wounds, without taking over the most extreme views of either one. This hos-

pital (166) admitted during this period, February 23 to March 23, 1918, 346 patients, of whom 95 were surgical, 168 sick and 63 gassed.

After a days' march in the rain, Field Hospital Company No. 168 arrived in Baccarat. Its work was at first very complicated, due to being split up into several detachments, made necessary by the character of the service and the arrangements that had to be made with the French authorities, and were, consequently, assigned in the following manner. One detail operated with the French in their ambulance hospital in Crystallerie park, an ideal place for the care of the sick. Another at Hospital No. 226, a large barracks hospital which had been partially destroyed by the Germans in their 1914 offensive. Here, sick and gassed were taken care of. Another detail was sent to the Hospital Temporaire, where sick were treated. Hospital Greche where all contagious diseases were given treatment, and a large detail was sent to Hospital Mixte, where severely wounded were treated. This latter hospital was very large and modern in all respects, caring both for civilian patients and soldiers. Excellent work was done here and on March 5, 1918, when after a barrage, about 100 severely wounded were admitted in several hours, without causing any inconvenience.

It was in Luneville and Baccarat, that the section obtained its training with the French. This gave us an insight into the enormous problem which was to confront us in the future.

On March 22, 1918, the Division having finished its training was ordered to a new sector.

One day's march brought Field Hospital Com-

pany No. 166 to Seranville and Field Hospital Companies Nos. 167 and 168 to Menil. At these points orders were received to stop—owing to the German offensive on the Western front, March 23, 1918, which necessitated the sending of all available French troops to that section of the line. Consequently, the hospitals as well as the rest of the Division were held awaiting further orders. Training went on as usual, during this halt.

As was stated in the preceding paragraphs, Field Hospital Company No. 165 remained at Langress to operate a hospital. This was not limited to divisional sick and wounded, but received patients from all of the troops in that area. Very excellent work was done and the following number of cases were handled, 709 cases, of which 65 were operative with only 3 deaths. On March 20, 1918, it was ordered to Humes to await orders. On March 29, 1918, orders were received and the company proceeded overland, spending the first night in La Marche and the second in Vayon. April 1, 1918, the company arrived at Menil.

The division surgeon's office was moved to Baccarat and on April 3, 1918, orders were issued for the entire section to go to Baccarat. This time the Baccarat Sector was taken over independently by the 42nd Division. This was the first American division to hold a sector entirely on its own responsibility in the American Expeditionary Forces.

On the return to Baccarat, the distribution of the hospitals was as follows: Field Hospital Company No. 167 opened and conducted a hos-

pital at the French Hospital No. 226 and a few days later turned it over to Field Hospital Company No. 165 and went into reserve.

Field Hospital Company No. 168 resumed operation at Mixte Hospital, Hospital Temporaire and took complete charge of Hospital No. 212. This latter hospital was soon worked into a very complete form, with operating room, etc., and here the following number of cases were treated; wounded 195, injured 258, sick 4683 and 31 gassed. Very little difficulty in this sector was experienced in operating the hospitals as the provisions and medical supplies were adequate.

To the personnel of Field Hospital Companies Nos. 165 and 168, during the period of operations at Baccarat, were added twenty female nurses each, who were sent forward from the different base hospitals. These nurses rendered most valuable and efficient service and remained as a part of the hospital personnel until the departure of the Division from Baccarat, late in June.

The increased prevalence of scabies and lice among our troops due to the fact that our troops had to occupy billets which the French colonial troops had evacuated, it became necessary for special treatment of these cases and upon the recommendation of Lieut.-Col. D. S. Fairchild, Jr., the division sanitary inspector, a site was selected on the Meurthe river, where it made a turn just outside of the city limits of Baccarat, and it was here that Field Hospital Company No. 166 established one of the most modern hospitals for the treatment of these cases in the American Expeditionary Forces. This place was beautifully located and received much attention from officers

visiting the Division, and was subsequently known as "Scratchville-by-the-Sea." Under that name a description was written by several New York papers. A picture of this hospital can be seen in the Sunday edition of the New York Times dated July 28, 1918, which will point out the advisability of selecting this site. Together with the treatment, the patients were allowed to swim in the river and to take sun baths on the banks, and this greatly aided in their quick recovery.

During this period details from Field Hospital Company No. 167 were employed to conduct the Divisional Medical Camp No. 1, which was located near Merviller and equipped for the treatment of venereal disease. Considerable care was exercised in the selection of a suitable site for this hospital and it was finally decided to locate it in the center of a densely wooded area, well screened from aerial observations, a precaution which was very necessary in this sector on account of the marked aerial activity. The terrain was suitably prepared by cutting out as much underbrush as possible in order to give sufficient ground space for tentage. This hospital proved to be a model of its kind, and successful beyond the most sanguine expectations of its organizers. It was promptly and fully equipped with a complete and up-to-date armamentarium for the latest and most rational treatment of venereal disease in the field. The patients were formed into labor details and required to perform such duties as were not inconsistent with their treatment or condition, nor calculated to militate against their recovery. A second detail from this company was assigned for the operation of a bathing and de-

- + Battalion Aid Station
- ± Regimental Aid Station
- ⊕ Ambulance Dressing Station
- ⌘ Detached Ambulances—Cab Stand
- △ Ambulance Company
- ⊗ Director Ambulance Section
- ⊕ Field Hospitals
- Detachment Field Hospital
- ⊗ Director Field Hospital Section
- △ Triage
- ⊗ Headquarters Sanitary Train
- ∞ Field Supply Depot
- ★ Division Surgeon
- ◆ Mined Road
- ⊕ Mobile Hospitals
- ⌘ Evacuation Hospital
- ⌘ Special Hospital
- ⌘ Base or General Hospital
- ⌘ Army Field Supply Depot



lousing plant, established at Indian village. A complete description of this excellent and most efficient element of the division medical department will be found in the history of the sanitary department, 42nd Division.

About the middle of May, 1918, appeared an epidemic of a peculiar form of respiratory disease accompanied by temperature and a very pronounced malaise. This disease at the first called "Three Day Fever," but afterward proven to be a severe type of influenza, spread rapidly among the troops with consequent swelling of hospital admissions to the limit of their capacity. The most baneful feature of these cases was their susceptibility to the development of secondary pneumonia of a most virulent and fatal type. It was then determined to open a ward especially designed for the specific treatment of these cases of pneumonia, and to this end, a ward tent was erected on the lawn, on the left of Field Hospital Company No. 168. This tent, was completely screened on all sides, and fitted with screen doors, so that the sides of the tent could be kept raised at all times, when the weather permitted. The weather was, for the most part warm and balmy, and the atmosphere free from dust, two conditions invaluable in the care and treatment of pneumonia.

Little or no difficulty was experienced from enemy activity at these hospitals with the exception of one night, in the early part of May, when several bombs were dropped with consequent destruction of part of one barracks building. No loss of life, however, was incurred.

The inevitable problem of the disposition of

patient's equipment, and one which has from time immemorial engaged the attention of all military hospital administration. A survey of the methods employed by all allied armies resulted in the recommendation by Lieut.-Col. D. S. Fairchild, Jr., that the method used by the French Army be adopted. This method was as follows: Upon admission to the hospital the entire equipment of the soldier was turned in to a depot established for the reequipment of discharged patients. His pack was opened, its contents examined and classified. All unserviceable material salvaged, and all other material put into serviceable condition for reissue.

While at Baccarat, Major McMillian was succeeded by Major Charles Goodman. Major Goodman was afterward transferred to Field Hospital No. 167; Vice Major James P. Graham who was assigned to the 117th Engineers. Major Wilbur S. Conkling succeeded Major Goodman.

The service at this time was very active, as frequent engagement along a 15 kilometer front produced practically every variety of war wound and injury, and consequently when the section moved out to play its part in the expected extensive operations on the Western front, it was well equipped with material and transportation, and the technical situation well in hand.

The section operated in these positions until June 19, 1918, when orders were received to move into a new area, where, we did not know. The section was relieved by the field hospital section of the 77th Division, the change being made without any disruption of the service. Field Hospital

No. 166, proceeded on the 17th to Ramberviller and opened a hospital in a building formerly used by the French as a hospital. Field Hospital Companies Nos. 165 and 167 proceeded on to Gudne-court and were joined by Field Hospital Company No. 168 two days later. On June 23, 1918, orders were received by Field Hospital Companies Nos. 165, 166 and 167 to proceed overland to Soulanges. Field Hospital Company No. 168 proceeded the same day to Chatel-sur-Moselle to entrain. On June 25, 1918, the company entrained and after a ride of about eighteen hours arriving at Vitry-La-Francois June 26, 1918, and by forced march joined the other field hospitals at Soulanges. Field Hospital Company No. 165 opened and conducted a small tent hospital for the care of the sick and wounded. The section remained here for three days. The division surgeon's office was located at Mairy. On June 28, 1918, Captain Peter P. Rafferty assumed command of Field Hospital Company No. 167, Vice Major Charles A. Goodman transferred to Base Hospital No. 15. On June 30, 1918, the section received orders to move, which had to be done at night on account of the very active aerial observation and the following day, July 1, 1918, found the section assembled at Camp de Tracteur. The division surgeon's office again moved, and was located at Badenay. While at this camp, training was carried on with considerable difficulty, and we learned that extensive defensive preparations were being made.

After the German offensive of July 14, 1918, which will soon be described Camp de Tracteur was completely demolished by shell fire.

A change was made in the office of the division surgeon while they were at Mairy. Col. D. S. Fairchild, Jr., became the division surgeon. Col. J. W. Grissinger becoming chief surgeon, 1st Army Corps.

The section was now fully equipped, completely organized, and its plan of action so systemized as to not only cope with the ordinary battle conditions, but a safeguard of elasticity was also developed whereby any and all emergencies arising from unforeseen circumstances might be covered.

About July 7, 1918, the section was moved to Bussey-le Chateau, and on the 8th, Field Hospital Companies Nos. 166 and 168 were moved to Ecury-sur-Coole, leaving Field Hospital Companies Nos. 165 and 167. At Bussy-le-Chateau, was started a hospital for the care of the wounded and gassed. The hospitals were joined at this point by Mobile Hospital No. 2 and preparations on a large scale were made. This hospital consisted of about thirty large ward buildings with two operating rooms, and was indeed quite well adapted for the treatment of wounded. It was situated on the outskirts of the town near a railroad station. In the meantime the French had brought a large gun up on a flat car and on account of a broken axle were compelled to leave it at this place, much to our sorrow, as will be related later on.

The other hospitals that were ordered to Ecury-sur-Coole, established a large tent hospital near a French military hospital and were joined by Evacuation Hospital No. 4, on July 10, 1918. The combining of these, made one large hospital which was required to make it very modern for opera-



COLONEL D. S. FAIRCHILD, JR., M.C., U. S. A.
Chief Surgeon 42nd Division (Rainbow)

tion in the field. Everything was now ready, waiting for the German offensive to begin.

On July 14, 1918, at 11:45 p. m., a veritable Hell broke loose. During this time, three officers were killed and four enlisted men were severely injured. One of the enlisted men being so badly injured that he never was able to return to duty. At Bussey-le-Chateau the bombardment was equally heavy, due to the fact that the Germans were trying to locate the large gun on the railroad track near the hospital. Here a large number of large calibre shells landed, with the result that a number of the buildings were completely demolished, also killing three enlisted men and wounded many of those already wounded. During the bombardment, the patients were carried into the trenches and dugouts, the surgeons proceeding with their dressings the best they could. This hospital was soon out of commission and the personnel transferred to Ecury-sur-Coole, with considerable difficulty. As the roads were of white chalk, they could be easily discerned at night by the enemy aircraft of which there were many. So active had these aeroplanes become that the patients had to be moved into the field at night, as they attempted and did, bomb the hospitals. All of the travel on the road must be done at night and it was at this point that the division surgeon had a thrilling experience. In an attempt to carry out his numerous duties, most of which had to be done at night, he was followed by an aeroplane, the occupant of which using his machine gun, thereby causing the division surgeon to leave his machine on the road and take shelter in the fields, three or four times in that one night.

It soon became evident that the distance between the front line and the hospital at Ecury was too far for the transportation of the seriously wounded, strongly against the advice of higher authorities, a detail from Field Hospital Company No. 168 was sent to Chalon where for five days and nights they worked under shell fire from long range guns and constantly being bombed all night, until the hospital had been partly destroyed, then all patients and personnel were ordered to leave the town.

Its previous general training in the Lorraine Sector, where its work covered the reception, treatment and administration of practically every variety of war wound and injury, had only to add to it the qualifications of the greater activity and a higher degree of mobility. It was necessary also to clear all decks for action by eliminating all unnecessary articles of equipment and reduce its armanentarium to a minimum; care at the same time having been taken to eliminate nothing which would in any way contribute to its efficiency.

July 21, 1918, Field Hospital Companies Nos. 165, 166, 167 proceeded overland to Luzancy. Field Hospital Company No. 168, following by train the next day.

The division surgeon's office was moved to La-Ferte-sous-Jouarre. The section encamped in the woods surrounding the pretty village of Luzancy. and spent the day in arranging equipment. Field Hospital Company No. 165 also established a hospital here, and transferred it later on to Field Hospital Company No. 168.

Field Hospital Company No. 167 left Luzancy 2:30 a. m., July 25, 1918 for Bezu-le-Guery, when

it relieved Field Hospital Company No. 104 of the 26th Division. Here a divisional gas hospital was set up and receiving patients by 9:30 a. m.

Field Hospital Company No. 165 and 168 arrived at Villers-sur-Marne on the 27th of July, very late in the evening.

The division surgeon received the information that the 84th Brigade would swing into close reserve, to take over the elements of the 26th Division and that the 83rd Brigade would follow as soon as they went through, in reserve. In going over the map, a place was selected one and one-half kilometers north of Chateau Thierry, and to this point, Field Hospital No. 166 was ordered, arriving on July 27, 1918. On their arrival there, they found the place which had been selected on the map, nothing more or less than cattle sheds, entirely impossible for a hospital, as it was in such a filthy condition. As it was impossible for them to locate a desirable point on the Soissons-Chateau Thierry road, the division surgeon, after a survey of Chateau Thierry itself, made arrangements with a French colonel, who was the town mayor, to take over a girls' convent, formerly used by the Germans, which would accommodate some 500 patients. Instructions were immediately given to Field Hospital Company No. 166 to proceed to this building and prepare it. They arrived at 3 p. m., and commenced their arduous task. It was very difficult, as the Germans had left it in a very deplorable condition, a description of which would not look well in print. The division surgeon anticipating possible early action, made arrangements at corps headquarters at 9 p. m., the same evening to take over twelve corps

ambulances and thirty-six, S. S. U., ambulances. Having obtained this authority, he proceeded to the hospital to transmit the authority for the transfer of these ambulances from the surgeon of the 26th Division, when upon arrival found that 350 patients had been admitted to the hospital and five operating teams, operating, only four hours after the taking over of the building. By daylight the hospital was crowded to its utmost, and had this foresight been neglected, the condition of affairs, would have been indescribable.

The division surgeon proceeded, post-haste, to Villers-sur-Marne, arriving at midnight in a terrific downpour of rain, ordering Field Hospital Company No. 165 to Chateau Thierry to assist Field Hospital Company No. 168, took over Field Hospital Company No. 105 of the 26th Division. This hospital was located in an old chateau owned by Baroness Houard, wife of the famous artist and cartoonist, Baron Houard. The Baroness is the daughter of Francis Wilson, the famous American actor, whose home is in New Rochelle, N. Y. The building is large and palatial, located in the upper part of Villers-sur-Marne, and surrounded by a very pretty park. In the early part of 1914, she had opened her home as a shelter for the Belgium refugees, who were driven out of their country by the advancing central armies. The misery and hardships of these refugees is beautifully set forth in her wonderful book, entitled, "My Home on the Field of Honor." She herself, became a refugee, when the advancing army proceeded and took over her residence. While occupied by the Germans it was used as a headquarters of one of the generals. Her book

aptly describes the destruction and devastation done by them while they were the occupants. Several German graves are now located in her front yard, where, previously only beautiful flowers grew. After the enemy had been driven back, she returned home and opened up a hospital for the reception of the French soldiers, who were either sick or wounded.

July 28, 1918, found Field Hospital Companies Nos. 166 and 168 crowded to their utmost, patients coming in by the hundreds. On the same day, Field Hospital Company No. 165 was ordered to Epieds to assist one of the ambulance companies in carrying on a triage. Many cases being treated there and then sent on to the rear. Field Hospital Company No. 167 moved to Chateau Thierry and established a hospital for the treatment of gas cases, in the grove just across the road from Field Hospital No. 166. Field Hospital Company No. 166 was the first American Hospital established in Chateau Thierry.

As the Germans retreated and our troops advanced, the distance between Chateau Thierry and the line got greater and greater, and it immediately became evident that a hospital must be started closer to the line than Chateau Thierry. consequently on July 30, 1918, Field Hospital Company No. 165 was ordered to Bezu-St.-Germain. The next day they were joined by Field Hospital Company No. 167, which opened a hospital for the treatment of gas patients, large numbers now coming in. These hospitals had to function under canvas, as previously the town was destroyed by artillery fire. The location of these hospitals will forever go down in history, as only

a short distance away was the location of one of the famous "Big Bertha's," that by shelling of Paris, so far away, became one of the world wonders.

The division surgeon's office moved from La Ferte to Trugny on July 28 and remained there until August 4, moving again to Beauvarden and remaining there until August 12. In this position the office was so far in advance as to almost become an advanced P. C., and on account of shell fire it was almost impossible to function. The Sanitary Train headquarters had moved to Bezu-St.-Germain and Field Hospital Section headquarters, to Chateau Thierry, in which positions they remained until August 12.

In this sector the field hospital companies were taxed to the utmost and at many times it seemed that they could not take care of any more, but on account of the "leap frog" system and elasticity, previously devised, by the division surgeon, the storm was weathered through, and after five sleepless nights, conditions remedied themselves.

Patients were evacuated from these hospitals by trucks, ambulances and boats. The boats plying on the Marne river. On August 12 the division surgeon's office was moved to La Ferte. Train and Field Hospital headquarters were moved to Luzancy, a few days later, followed by Field Hospital Companies Nos. 165, 166, 167 and 168.

Field Hospital Company No. 166 opened up a hospital for the divisional sick and on August 16 the entire section less Field Hospital Company No. 168 proceeded to Bourmont overland. Field

Hospital Company No. 168 proceeded by train and arrived on August 19, 1918.

At Bourmont from August 18 to 28 Field Hospital Companies Nos. 166 and 167 conducted a hospital for the specialized treatment of skin and venereal disease, with baths available. Field Hospital Companies Nos. 165 and 168 remaining in rest.

On August 28, 1918, the entire section left for Longchamps, about 12 kilometers east of Neufchateau, where quarters were established and a hospital operated by Field Hospital Company No. 168 for sick and wounded. The time spent here was used in checking up property and reequipping for the next engagement.

The division surgeon's office was located at this time in Chatenois. A few changes took place in the section, also at this time. Lieut.-Col. J. W. Frew, was assigned to headquarters, Fourth Army Corps, Major W. S. Conkling, assuming command of the 117th Sanitary Train, and Major J. S. Spealman becoming director, Field Hospital Section. Captain J. F. Nutz became commanding officer of Field Hospital Company No. 166.

The section left Longchamps on the 4th of September at 10:00 p. m. and arrived at Germiny at 4:30 a. m. on the 5th. From whence, after a stay of two days it moved to Bickelay, which was reached on midnight of September 7. This point served as a resting place for one day, and at night of the 8th the section again moved with Lagny as its destination. Stormy weather made our progress very difficult for these last two nights.

The division surgeon's office, located at Co-

lombes-la-Belle on September 6 and 7 and at Toul on the 8th and 9th. The night of September 10 found the section located in the Forest-de-la-Reine surrounded on all sides by all branches of service awaiting the initial move to the St. Mihiel offensive, which began on the morning of September 12. During the stay in this forest two miserable nights were experienced as the rain fell in torrents.

The division surgeon's office moved into Bruley and remained there from the 10th to the 21st of September.

On the afternoon of the 11th, Field Hospital Company No. 166 proceeded to Ancerville, where it established a triage in an old barn. Shock rooms and dressing rooms were immediately fixed and arrangements were made whereby all patients were brought in the front door, treated in the triage and evacuated through the rear door, thus making one of the best triage positions we ever had. Field Hospital Company No. 168 received orders at midnight the same night to proceed at 4 o'clock in the morning for Ancerville to assist Field Hospital Company No. 166. Start was made at exactly 3 o'clock, but on account of the congested road, progress was slow, but as the route took them through the different artillery positions, a very impressive sight was in store for them. The offensive was now on in earnest and as they passed down the road within twenty-five feet of many large railroad guns, whose fire was directed by observation balloons directly overhead, difficulty was encountered with the horses and mules. Just at daybreak they passed many guns positions, principally of the "75" type.

Flashes could be seen every place both on their right and left. The guns were pounding away at a terrific rate, caissons were all hitched up, troops in squad formation and everything ready for a rapid advance. Montsec could be seen directly in front, flying over which were two aeroplanes, directing the fire and it was a beautiful sight to see the flash of the big guns behind, and the bursting of the shell on Mont Sec in front. September 12, Field Hospital Companies Nos. 165 and 167 proceeded to Mandres and were held in reserve. On September 14 they proceeded to Essey over almost impassible roads as the roads passed were through the French and German trenches that had not been used for four years, and during that time were always subject to shell fire.

The division surgeons office was located in Ancerville from September 21st to the 26th.

At Essey, Field Hospital Company No. 165 and Field Hospital Company No. 167 opened and functioned until the work of the Division had been completed, both as to the St. Mihiel offensive and to minor operation in the Woevre.

Field Hospital Company No. 168 proceeded to Beaumont on September 21 and opened a hospital assisted by Field Hospital Company No. 166 in the only building left standing in the town and part of this building had been demolished by shell fire. The entire personnel of these hospitals were compelled to sleep in dugouts. Rats, cooties and aeroplanes turned our night's rest into a nightmare. While here, many aerial battles were fought in full view. In this position the section functioned with the exception of a few minor moves until October 1, 1918.

On October 1 orders were issued from the division surgeon's office for the entire section to move to the Verdun sector. This was accomplished in two or three moves and by two distinct routes. Field Hospital Companies Nos. 165, 166 and 167 going overland by trucks, made their first stop at Hieppes. Here Field Hospital Company No. 166 established a small hospital for the care of the sick and injured, evacuating to an evacuation hospital nearby. Field Hospital Company No. 168 proceeded with the horse drawn ambulance company by the St. Mihiel route to the same point. Their first stop was just outside of the famous town of St. Mihiel, joining the rest of the section at Hieppes on October 3.

On October 4 the entire section was ordered to Dombasle, which was reached the same day. Field Hospital Company No. 168 established a small hospital under tentage in an orchard situated above the town.

The division surgeon's office moved to Recicourt. During this night the entire section was bombed by aeroplanes and many horses were killed, but no casualties among the personnel were suffered.

On the 5th Field Hospital Companies Nos. 165, 166 and 167 moved to the Melancourt Woods, a few kilometers above Avocourt and started a hospital under tents. On the morning of the 6th they moved to a point just below Avocourt, where they remained until the evening of the 7th from whence they moved to the Bois de Cheppy taking over, on the 8th the field hospitals of the 1st Division. They remained here until the 11th of October.

Captain A. J. Campbell was made assistant to the division surgeon during the stay at Cheppy.

Field Hospital Companies Nos. 165 and 167 moved on October 11 to Baulny. Field Hospital Company No. 166 moved to Cheppy the same date and was here joined by 168 on the afternoon of the 12th.

Field Hospital Company No. 165 after arriving at Baulny opened up a triage and hospital for the seriously wounded. Field Hospital Company No. 167 opening a gas hospital.

At both of these points the number of patients was enormous.

At both of these points an enormous number of patients were treated under the most trying circumstances, for they were being shelled constantly in the day time and bombed by aeroplane at night.

The rear Echelon of the division surgeon's office was moved back to Recicourt and the advanced Echelon forward to Baulny, on the 22nd of October.

On October 25 Field Hospital Companies Nos. 166 and 168 moved up to Baulny, going into reserve.

On November 4, 1918, Field Hospital Companies Nos. 166, 167 and 168 were ordered to move forward in the night. The enemy fire was terrific while this move was taking place. Field Hospital Companies Nos. 166 and 167 proceeded to Authe, arriving there on the night of the same day.

Field Hospital Company No. 166 opened up a triage and hospital for the seriously wounded and Field Hospital Company No. 167 opened up a

hospital for the treatment of gas patients. Field Hospital Company No. 168 arrived at Briquenay on November 5 and opened a hospital for the seriously sick. They continued to operate in this position until the armistice was signed. Field Hospital Company No. 165 arrived at Briquenay the next day and assisted Field Hospital No. 168 and on the 7th the former company proceeded to Authe and went into reserve. On the 8th Field Hospital Companies Nos. 166 and 167 proceeded to Tanny to open a hospital for all classes of sick. Field Hospital Company No. 166 proceeded to Chenery, arriving on the 9th and there, it was split up into two details. One detail in conjunction with an ambulance company, opened a triage and the other opening a hospital for the seriously wounded.

The division surgeon's office was located at Briquenay on the 4th until the 10th, when it moved to Chenery.

The last night in Chenery will never be forgotten as it was bombed by aeroplane and shelled by range guns.

In the above positions the section remained until the signing of the armistice and cessation of hostilities November 11 at 11 a. m., 1918.

FIELD HOSPITAL NO. 165

117th Sanitary Train, 42nd Division. Bad-Neuenshr, Germany

	Wounds	Injury	Gas	Disease	Total
Langres .....	...	65	..	644	709
Baccarat	29	69	20	1733	1851
Soulanges .....	...	3	1	57	61
Bussy Le Chateau.....	126	25	3	233	387
Luzancy	5	4	..	40	49
Bezu St. Germain.....	174	25	..	238	437
Germiny	2	12	..	84	98
Essey	13	..	..	....	13
Baulny	369	7	1	16	393
Tannay	184	13	6	121	324
Stenay .....	...	5	..	159	164
Greisch	2	5	..	171	178
Prumzurlay .....	...	5	..	166	171
Lissendorf .....	...	5	..	149	154
Neuenahr	1	8	..	416	425

Note: Records of Camp Hospital No. 24 operated by this hospital not available, approximately 709 medical and surgical cases were treated there. Baulny Triage: 5800 wounded, 393 of whom required operation or shock treatment:

Epieds with Ambulance Company handled approximately 2000.

Field Hospital 165, 117, Sanitary Train, Mch. 23, 1919
Memo. for Major Campbell:

The 165th Field Hospital was called out and mustered into Federal Service on the 25th day of July, 1917, at Camp Ordway, Washington, D. C., it then being the 1st D. C. F. H., N. G.

Left Camp Ordway August 19, 1917, enroute to Camp Mills to form a part of the Rainbow Division, it being the first complete company on the grounds. Here it was known as the 1st F. H. of the 42nd Division, previous to the final change.

Immediately after arrival a hospital was pitched near the Clinton roads (main) entrance until the arrival of the Alabama Infantry forced the company to move to a permanent site on the "back road to camp." Here a 200 bed divisional camp hospital was established, besides a surgical ward and operating room being taken over at the Nassau General Hospital in Mineola. On October 1, upon being relieved by a camp hospital unit, 307 sick ranging from measles to meningitis meningococcus had been treated, 22 surgical operations performed, with but two deaths besides inoculating and vaccinating practically the entire division.

HENRY F. SAWTELLE,
Major M. C., U. S. A.

History of Field Hospital 166

In compliance with telephonic instruction D. S. O., March 24, 1919, the following is submitted:

Field hospital 166 sailed for foreign service October 18 on the U. S. S. Grant. October 22, 1917, boilers failed and U. S. S. Grant returned to New York, docking October 27, 1917.

The unit went into camp at Fort Jay, Governor's Island for three days when it moved to Camp Merrit, New Jersey, remaining there until November 14, when it sailed the second time on H. M. S. Celtic, landing in Liverpool, England, December 2.

They traveled by train to Camp Windledown, near the City of Winchester, being quartered in barracks until December 11, on which date they sailed for La Harve, France.

Remaining in La Harve from the 11th to the 14th, they entrained for La Fouche, France, arriving there on the 16th.

Leaving La Fouche on the morning of the 28th, in heavy marching order, the company marched overland to Echot. One more day's journey took them to Mandres. The following day, they passed through Rolampont, arriving at Longeau on December 30, where they remained until January 8, 1918, when they moved to Humes.

On February 17, they marched to Rolampont, where they entrained for Moyon. The distance from Moyon to Loro-Montzey was covered on foot, on February 19, 1918. Leaving Loro-Montzey on the morning of February 21, the company marched to Luneville, arriving there the evening of the same day.

From Camp Mills until January 5, 1918, at which time he went to school Major John F. Spealman, M. C., was commanding, First Lieut. Roy D. Bryson assumed command on the same day. He was relieved by First Lieut. William W. Van Dolsen on January 25, 1918. Other officers of the company at this time were: First Lieut. Claude F. Selby, M.C.; First Lieut. Victor L. Souby, D.C.; First Lieut. Roy E. Knight, D.C.; First Lieut. Harry Knight, D.C.; First Lieut. Carl O. Reed, M.C.; First Lieut. Edwin G. Reade, M.C.; First Lieut. Earl B. Erskine, M.C.

HEADQUARTERS FIELD HOSPITAL 166

117th Sanitary Train, 42nd Division Neuenahr, Germany, American Expeditionary Forces, Mch. 20, 1919
 From: Commanding Officer, Field Hospital No. 166.

To: Division Surgeon, 42nd Division, American Expeditionary Forces.

Subject: Patients received by Field Hospital No. 166 since arriving in France.

1. The following data required for completing Train History of the number of patients hospitalized and triaged by Field Hospital No. 166 since arriving overseas is as follows:

	Wounds	Injury	Gas	Disease	Oper.	Non-Oper.	Deaths	Total
Luneville, France, Auxiliary Hospital No. 102, Feb. 23 to March 23, 1918.....	72	23	63	188	15	25	3	346
Baccarat, France, April 23 to June 19, 1918 .....	...	..	..	736	..	..	0	769
Skin Diseases (33 Contagious)						10	0	42
Ramberviller, France, June 20-21, 1918	...	4	3	35	..			
Chateau-Thierry, France, July 26 to August 3, 1918.....	516	6	127	21	47	20	67	670
Luzancy, France, August 12-16, 1918.....	7	13	7	262	..	..	..	289
Bourmont, France, August 24 to August 28, 1918.....	Skin Diseases Only			173	..	..	..	173
Ansauville, France, Sept. 12-19, 1918.....	79	3	26	7	10	69	15	115
Authé, France, Nov. 5-7, 1918.....	10	..	..	2	3	7	1	12
Tanney, France, Nov. 8, 1918.....	4	..	..	1	2	2	..	5
Chimery, France, Nov. 8-9, 1918.....	55	3	15	13	5	6	13	86
Neuenahr, Germany, Feb. 8 to date.....	14	2	..	104	..	..	..	120

Operated in conjunction with Evacuation Hospital No. 4 at Ecury-sur-Coole, France, July 15 to July 19, 1918, helping care for about 2500 gas patients.

Operated in conjunction with Field Hospital No. 168 at Neuenahr, Germany, December 16 to January 4, 1919, helping care for about 1500 patients.

At least 5000 patients were distributed at Chateau Thierry readjusting bandages, etc., and feeding them before they were sent on to the rear. These patients were not hospitalized.

Operating Triage at Neuenahr, Germany, from January 4, 1919, to date with total admittance of 4062 patients.

CARL O. REED,

Capt. M. C., U. S. A.

FIELD HOSPITAL 167

Place or Front	Wounded	Injuries	Gas	Disease	Total	Deaths
Mauvages	1	....	102	....	..
Luneville	454	101	....	2
Baccarat	4	346	....	3
Champagne	16	12	....	..
Chateau Thierry.....	..	24	922	265	....	1
Bourmont	83	....	..
St. Mihiel.....	44	...	....	..
Argonne	34	9	1128	253	....	2
Trip to Germany.....	..	121	....	913	....	4
Neuenahr	326	....	..

At Bezu le Guery about 200 wounded were given food and first aid which were never taken up on our records.

At Chateau Thierry on the night of July 28, about 250 slightly wounded and gassed were given food and first aid which were never recorded on hospital reports.

CASES HOSPITALIZED AT FIELD HOSPITAL NO. 168

Place or Front	Date	Wounds	Injuries	Gas	Disease	Total	Deaths
Camp Baldwin,	July 13, 1917						
Colorado	September 8, 1917.....	...	...	...	109	109	.
Mauvages	November 11, 1917						
France	November 15, 1917.....	...	...	...	75	75	..
Chalines	November 15, 1917						
France	December 24, 1917.....	...	25	...	420	445	2
Baccarat	February 22, 1918						
France	June 21, 1918.....	328	209	327	2269	3134	44
Chalons-sur-	July 16, 1918						
Marne, France	July 19, 1918.....	24	...	...	....	24	4
Luzancy,	July 25-26,						
France	1918	6	3	1	31	41	..
Villiers-sur-	July 27, 1918						
Marne, France	August 15, 1918.....	395	5	...	49	449	36
Longchamp	August 30, 1918						
France	September 5, 1918.....	...	7	...	180	187	..
Beaumont	September 21, 1918						
France	October 1, 1918.....	...	10	3	290	303	..
Dombasle							
France	October 5, 1918.....	...	...	...	24	24	..
Bois de Cheppy,	October 8, 1918						
France	October 12, 1918.....	47	11	6	339	403	4

Cheppy	October 12, 1918					
France	October 24, 1918.....	36	46	247	475	804
Baulny						4
France	October 31, 1918.....	...	...	...	25	..
Briquenay	November 5, 1918					
France	November 14, 1918.....	316	38	10	540	2
Arlon						
Belgium	November 22, 1918.....	...	...	...	28	..
Mersch						
Luxembourg	November 23, 1918.....	...	...	...	17	..
Dollendorf	December 9, 1918					
Germany	December 14, 1918.....	...	5	...	100	105
Neiderzessen	December 14, 1918					..
Germany	December 16, 1918.....	...	10	...	197	..
Neuenahr	December 16, 1918					
Germany	March 1, 1919.....	...	109	...	1440	3
	Total, July 13, 1917 to March 1, 1919.....	990	478	274	6207	99

Total surgical deaths, 75; operative, 47; non-operative, 12; dead on arrival, 16.

Number of serious multiple injuries, 50.

At Ecury-sur-Coole, about 2500 gas patients were taken care of by F. H. No. 168, going on record for Evacuation Hospital No. 4 (July 15, to July 21, 1918).

At Villiers-sur-Marne, July 27 to August 14, 1918, about 5000 wounded were estimated to have passed through F. H. No. 168, of which no record was made, and each received something to eat, at least.

LUNEVILLE SECTOR

	Killed in Action		*Wounded and †Gassed		Missing In Action	
	Officers	Men	Officers	Men	Officers	Men
Headquarters and Troop.....	0	0	0	1	0	0
149th Machine Gun Battalion.....	0	0	0	0	0	0
83rd Infantry Brigade.....	0	0	0	0	0	0
165th Infantry.....	1	24	19	408	0	4
166th Infantry.....	0	2	1	11	0	0
150th Machine Gun Battalion.....	0	9	5	138	0	0
84th Infantry Brigade.....	0	0	0	0	0	0
167th Infantry.....	0	4	1	8	0	0
168th Infantry.....	1	25	2	69	0	0
151st Machine Gun Battalion.....	0	1	0	5	0	0
67th Field Artillery Brigade.....	0	0	0	0	0	0
149th Field Artillery.....	1	1	1	27	0	0
150th Field Artillery.....	0	0	0	0	0	0
151st Field Artillery.....	0	2	9	71	0	0
117th Trench Motor Battery.....	0	0	0	0	0	0
117th Field Signal Battalion.....	0	1	0	1	0	0
117th Engineer Regiment.....	0	1	0	6	0	0
117th T. H. and M. P.....	0	0	0	0	0	0
117th Ammunition Train.....	0	1	0	0	0	0
117th Engineer Train.....	0	0	0	0	0	0
117th Supply Train.....	0	0	0	3	0	0
117th Sanitary Train.....	0	9	0	2	0	0
Total.....	3	80	36	750	0	4

*Number wounded officers, 24, men, 339.

†Number gassed officers, 14; men, 411.

	Killed in Action		*Wounded and †Gassed		Missing In Action	
	Officers	Men	Officers	Men	Officers	Men
Headquarters and Troop.....	0	0	0	0	0	0
149th Machine Gun Battalion.....	0	0	1	27	0	0
83rd Infantry Brigade.....	0	0	0	0	0	0
165th Infantry.....	0	3	0	8	0	2
166th Infantry.....	0	12	7	157	0	2
150th Machine Gun Battalion.....	0	0	0	6	0	0
84th Infantry Brigade.....	0	0	0	0	0	0
167th Infantry.....	0	8	4	98	0	3
168th Infantry.....	1	21	14	369	1	7
151st Machine Gun Battalion.....	0	0	3	28	0	0
67th Field Artillery Brigade.....	0	0	0	0	0	0
149th Field Artillery.....	0	0	1	18	0	0
150th Field Artillery.....	0	2	2	91	0	0
151st Field Artillery.....	0	0	5	38	0	0
117th Trench Motor Battery.....	0	2	0	11	0	0
117th Field Signal Battalion.....	0	0	0	5	0	0
117th Engineer Regiment.....	0	0	0	38	0	0
117th T. H. and M. P.....	0	0	0	0	0	0
117th Ammunition Train.....	0	0	1	4	0	0
117th Engineer Train.....	0	0	0	0	0	0
117th Supply Train.....	0	0	0	0	0	0
117th Sanitary Train.....	0	0	0	21	0	0
Total.....	1	48	38	919	1	14

*Number wounded officers, 23; men, 202.

†Number gassed officers, 15; men, 717.

CHAMPAGNE SECTOR

	Killed in Action		*Wounded and †Gassed		Missing In Action	
	Officers	Men	Officers	Men	Officers	Men
Headquarters and Troop.....	0	0	0	3	0	0
149th Machine Gun Battalion.....	0	0	0	3	0	0
83rd Infantry Brigade.....	0	0	0	1	0	0
165th Infantry.....	1	43	7	245	0	3
166th Infantry.....	0	41	9	304	1	10
150th Machine Gun Battalion.....	0	16	0	32	0	2
84th Infantry Brigade.....	0	0	0	0	0	0
167th Infantry.....	1	66	5	300	0	10
168th Infantry.....	0	60	6	238	0	1
151st Machine Gun Battalion.....	0	12	2	55	0	0
67th Field Artillery Brigade.....	0	0	0	0	0	0
149th Field Artillery.....	2	1	3	7	0	0
150th Field Artillery.....	0	2	1	20	0	0
151st Field Artillery.....	1	2	3	55	0	1
117th Trench Motor Battery.....	0	2	0	2	0	0
117th Field Signal Battalion.....	0	1	0	5	0	0
117th Engineer Regiment.....	0	9	1	41	0	0
117th T. H. and M. P.....	0	2	0	0	0	0
117th Ammunition Train.....	0	0	0	0	0	0
117th Engineer Train.....	0	0	0	4	0	0
117th Supply Train.....	0	0	0	1	0	0
117th Sanitary Train.....	0	0	0	10	0	0
Total.....	5	257	37	1326	1	27

*Number wounded officers, 27; men, 986.

†Number gassed officers, 10; men, 340.

CHATEAU THIERRY SECTOR

	Killed in Action		*Wounded and †Gassed		Missing In Action	
	Officers	Men	Officers	Men	Officers	Men
Headquarters and Troop.....	0	1	0	4	0	0
149th Machine Gun Battalion.....	0	8	1	134	0	1
83rd Infantry Brigade.....	0	0	0	2	0	0
165th Infantry.....	13	224	45	1135	0	58
166th Infantry.....	5	125	6	739	0	2
150th Machine Gun Battalion.....	0	21	4	111	0	0
84th Infantry Brigade.....	0	0	1	0	0	0
167th Infantry.....	6	214	41	1026	0	12
168th Infantry.....	3	128	40	1077	0	0
151st Machine Gun Battalion.....	0	27	4	66	1	12
67th Field Artillery Brigade.....	0	0	0	1	0	0
149th Field Artillery.....	0	0	3	23	0	0
150th Field Artillery.....	0	11	1	49	0	0
151st Field Artillery.....	0	2	7	56	0	0
117th Trench Motor Battery.....	0	0	0	0	0	0
117th Field Signal Battalion.....	0	3	0	16	0	0
117th Engineer Regiment.....	1	6	0	42	0	0
117th T. H. and M. P.....	0	0	0	0	0	0
117th Ammunition Train.....	0	5	1	10	0	1
117th Engineer Train.....	0	1	0	2	0	0
117th Supply Train.....	0	0	0	1	0	0
117th Sanitary Train.....	1	0	0	13	0	0
Total.....	29	776	154	4607	1	86

*Number wounded officers, 129; men, 3704.

†Number gassed officers, 35; men, 903.

ST. MIHIEL SECTOR

	Killed in Action		*Wounded and †Gassed		Missing In Action	
	Officers	Men	Officers	Men	Officers	Men
Headquarters and Troop.....	0	1	0	5	0	0
149th Machine Gun Battalion.....	0	0	0	0	0	0
83rd Infantry Brigade.....	0	0	0	0	0	0
165th Infantry.....	0	28	3	148	0	14
166th Infantry.....	2	23	7	115	0	20
150th Machine Gun Battalion.....	0	1	0	20	0	3
84th Infantry Brigade.....	0	0	0	2	0	0
167th Infantry.....	2	34	8	200	1	7
168th Infantry.....	7	61	13	254	0	1
151st Machine Gun Battalion.....	0	2	2	39	0	0
67th Field Artillery Brigade.....	0	0	0	0	0	0
149th Field Artillery.....	0	0	0	9	0	0
150th Field Artillery.....	1	1	0	8	9	0
151st Field Artillery.....	0	0	1	21	0	0
117th Trench Motor Battery.....	0	0	0	0	0	0
117th Field Signal Battalion.....	0	1	0	9	0	0
117th Engineer Regiment.....	0	10	0	20	0	0
117th T. H. and M. P.....	0	0	0	0	0	0
117th Ammunition Train.....	0	1	1	7	0	0
117th Engineer Train.....	0	0	0	0	0	0
117th Supply Train.....	0	0	0	1	0	0
117th Sanitary Train.....	0	0	1	3	0	0
Total.....	12	163	36	861	1	45

*Number wounded officers, 31; men, 792.

†Number gassed officers, 5; men, 69.

MEUSE ARGONNE SECTOR

	Killed in Action		*Wounded and †Gassed		Missing In Action	
	Officers	Men	Officers	Men	Officers	Men
Headquarters and Troop.....	0	0	0	0	0	0
149th Machine Gun Battalion.....	0	0	0	3	0	0
83rd Infantry Brigade.....	0	0	0	0	0	0
165th Infantry.....	4	110	14	902	0	172
166th Infantry.....	0	70	3	474	0	4
150th Machine Gun Battalion.....	0	15	1	118	0	25
84th Infantry Brigade.....	0	0	0	0	0	0
167th Infantry.....	3	84	13	544	0	19
168th Infantry.....	2	85	18	598	0	4
151st Machine Gun Battalion.....	0	8	0	47	0	0
67th Field Artillery Brigade.....	0	0	0	0	0	0
149th Field Artillery.....	0	12	5	108	0	0
150th Field Artillery.....	0	6	3	74	0	2
151st Field Artillery.....	0	7	12	99	0	0
117th Trench Motor Battery.....	0	2	0	9	0	0
117th Field Signal Battalion.....	0	0	0	13	0	0
117th Engineer Regiment.....	0	9	2	40	0	1
117th T. H. and M. P.....	0	0	0	0	0	0
117th Ammunition Train.....	0	1	2	12	0	0
117th Engineer Train.....	0	0	0	0	0	0
117th Supply Train.....	0	0	0	2	0	0
117th Sanitary Train.....	0	2	0	4	0	1
Total.....	9	411	73	3047	0	228

*Number wounded officers, 46; men, 2380.

†Number gassed officers, 27; men, 667.

	Killed In Action		Wounded In Action		Missing In Action		Gassed In Action		Total	
	Officers	Men	Officers	Men	Officers	Men	Officers	Men	Officers	Men
Luneville Sector.....	3	80	24	359	0	4	14	411	41	834
Baccarat Sector.....	1	48	23	202	1	14	15	717	40	981
Marne Defensive (Champagne)	5	257	27	986	1	27	10	340	43	1610
Aisne-Marne Offensive (Cha- teau-Thierry)	29	776	129	3704	1	86	25	903	184	5469
St. Mihiel Offensive.....	12	163	31	792	1	45	5	69	49	1069
Meuse-Argonne Offensive.....	9	411	46	2380	0	*64	27	667	82	3522
Total.....	59	1735	280	8403	4	240	96	3107	439	13485

*Figure estimated.

CASES HOSPITALIZED IN FIELD HOSPITALS, 117TH SANITARY TRAIN, 42ND DIVISION, AMERICAN EXPEDITIONARY FORCES

Office of the Surgeon

Locations	Wounds		Injuries		Gas		Disease		Total	
United States.....		0		22		0		394		416
France		10,052		668		7,425		14,383		32,528
Germany		17		270		0		4,027		4,314

The total number of patients passing through the hospitals, with and without records is 41,268. Of this number, many were passed through the Field Hospitals before the ambulance companies received their ambulances and in the different area, many patients were sent in by other Divisions and Corps ambulances, French ambulances, Camions, trucks and automobiles, which will explain the number passing through the hospitals and the number carried by the ambulance companies.

BRIEF HISTORY OF MOBILE HOSPITAL NO. 1

COLONEL DONALD MACRAE, JR.

The formation of Mobile Hospital No. 1 was begun April 25, 1918 by Major Donald Macrae, Jr., M.C., U. S. A., under the following order:

AMERICAN EXPEDITIONARY FORCES
HQS. SOS., France, April 25, 1918.

Special Orders {
No. 44 }

Extract

Par. 42. Major Donald Macrae, Jr., M.R.C., will proceed from Camp Hospital No. 27 to Paris, France, for duty as Commanding Officer of Mobile Hospital No. 1, with station in that city while this hospital is located there.

The travel directed is necessary in the military service.

By Command of Major General Kernan:
JOHNSON HAGOOD,
Chief of Staff.

Official:

L. H. BASH,
Adjutant General.

This order was about to make a complete change in the destiny not only of the organization of Unit K, but of each and every member thereof. Each man and woman, when later transferred to Mobile Hospital No. 1 realized the importance of the active work ahead, but few appreciated the frightfulness and awfulness of the life, the horror of the shells and bombs, and fewer still held the slightest conception of the meaning of the words "non-transportable wounded."

The sights seen, and the life lived with Mobile One have impressed each and every one of its personnel to the extent that his whole moral fabric must be more or less permanently affected.

HOSPITAL UNIT K

Major Macrae, after his return from Mexican Border service in March 1917, resigned from the Iowa National Guard in order to organize a hospital unit.

Having received permission from the surgeon general of the army, this unit was formed in short order and given the name K, in spite of the fact that it was the first letter unit ready for service, April 1917.

The twelve medical officers, twenty-one nurses, and fifty orderlies were soon enrolled in the Red Cross, mustering in of these men into the United States Army did not take place, however, until June 18, 1917.

The following Iowa doctors constituted the staff: Major Donald Macrae, director, Council Bluffs; Capt. F. Earl Bellinger, Council Bluffs; Capt. Chalmers A. Hill, Council Bluffs; Capt. John W. Shuman, Sioux City; Capt. Louis L. Henninger, Council Bluffs; Lieut. John S. McAtee, Council Bluffs; Lieut. Aldis A. Johnson, Omaha; Lieut. Robert C. Crumpton, Webster City; Lieut. Albert E. Sabin, Kirkman; Lieut. Robert S. Moth, Council Bluffs; Lieut. Louis E. Hanisch, Council Bluffs; Lieut. Edwin H. Pratt, Omaha.

Sixteen of the twenty-one nurses were from the Jennie Edmundson Memorial Hospital of



COLONEL DONALD MACRAE, JR.

Council Bluffs. Practically all of the officers were sent to various training camps.

On November 9, 1917, orders were received to mobilize all officers and men at Fort Porter, Buffalo, N. Y. The organization arrived at Buffalo, November 14, when all were "present or accounted for," except Lieutenant Pratt, who was later dropped from the rolls and Lieut. Peter G. Fagone, New York roentgenologist, was substituted for him. The nurses departed from Council Bluffs on Christmas eve for Ellis Island.

On January 15, 1918, the entire organization boarded the Cunard liner "Carpathia," now at the bottom of the Atlantic, and sailed the same day for "somewhere." At Halifax, we were met by numerous other transports and conveyed across the sea.

Our ship docked at Glasgow, Scotland, January 31, 1918. That same night saw the officers and men headed overland for Winnel Down "rest" camp at Winchester, England, while the nurses proceeded to London.

After three days' "rest," we were sent to La Havre, France, by way of Southampton, to another "rest" camp. After twenty-four hours here, the outfit was ordered via box cars to Angers, France.

Here we met the nurses and were assigned to duty with Base Hospital No. 27 from the University of Pittsburgh. At this place, a strong attempt was made to break up Unit K, but by exerting strenuous efforts we were able to keep the organization intact.

However, February 22 found Capt. F. Earl Bellinger, Capt. John W. Shuman, Lieut. Robert

S. Moth, and the writer on their way to the British front. After spending two weeks on the actual front along Vimy Ridge at British Casualty Clearing stations, and the remaining time along the British lines of communication, base hospitals at Boulogne and Paris and the school at Langres, the quartette was ordered back to Tours, headquarters services of supply, where, to their complete surprise, they found Unit K in charge of Camp Hospital No. 27, having been ordered there during their absence.

Here the writer was placed in charge of surgery, Captain Shuman headed the medical side, while Captain Henninger and Lieutenant McAtee were made chiefs respectively of the eye and ear, and genito-urinary sections. Captains Bellinger and Hill became operating surgeons, and Lieutenant Fagone was put in charge of x-ray work.

Captain Johnson, having been promoted, was ordered to Dijon as bacteriologist for the Central Medical Department laboratory.

At Tours, the writer was placed in charge of an operating table at the French Hospital, where under the supervision of M. Major Ombredann and under the direction of M. Capt. M. Ledoux-Lebard, the famous roentgenologist, he removed foreign bodies from the lung.

(This was new work for the author and while he cannot agree with the radical stand of Ombredann, yet he was fascinated by the very audacity of the man, and equally astonished at the remarkable results obtained in practically all cases. It might be said, however, that these were all old cases, ten days to three weeks from the time of being wounded, and all were in good sur-

gical condition. Anæsthetic used was ether by means of the Ombredann mask; free incision with resection of ribs if necessary.

The lung was boldly picked up with forceps, if necessary, and the foreign body rapidly approached under the direction of the fleuroscope. After removal of the foreign body, the lung was sutured, pleura cleared out and sutured without drainage, and the muscles and skin often closed leaving the drainage tube in these parts for twenty-four hours.

Little reaction was noticeable, the patient progressing rapidly to recovery. Many other interesting conditions were seen at this hospital, one of which I remember particularly. A young Frenchman with a piece of shrapnel the size of a 10 cent piece, found free by the fleuroscope, in the right auricle of the heart. The man was apparently perfectly normal in every other way, nor could one detect by auscultation, the slightest deviation from the normal in any of the heart sounds.)

The writer, after receiving the order to take command of Mobile Hospital No. 1, proceeded to Paris the same night. The next day, Lieutenant Moth and eight enlisted men from Unit K, reported to him there.

Together, we "took over" the tents, camions, x-ray and operating equipment, from the French Army at the Service de Sante, located at Neuilly, just outside the walls of Paris.

The French were slow in producing the materials, but at last everything was secured and a portion of the hospital was erected on the old race track in the Bois de Boulogne.

Gradually, by persistent efforts on the part of all concerned, Unit K was absorbed by Mobile Hospital No. 1, and when, on June 12, 1918, orders were received to proceed to Coulommiers and become part of the First Army to strike at Chateau Thierry, Mobile Hospital No. 1 was ready and fully equipped.

While in Paris, nightly air raids and "Big Bertha" only served to put more "pep" into our efforts. Some difficulty was experienced in procuring trucks, due to the fact that all Paris was in readiness to evacuate. Chateau Thierry is but forty miles from Paris.

When we arrived at Coulommiers, selected wounded were already coming in. At this point we were in close touch with Evacuation Hospital No. 7, Lieut.-Col. Wm. H. Tefft, M.C., U. S. A. in command.

The number of wounded exceeded anything any of us had anticipated, therefore, it became necessary to add more and more tables and call for many operating teams, until finally, Mobile Hospital No. 1, with the writer as chief of the surgical staff of both hospitals, controlled twenty-eight operating tables, which during our stay here of six weeks, were busy most of the time day and night.

During the six weeks, twenty-six thousand cases passed through these two institutions.

Shelling and bombing and many narrow escapes only stimulated our nurses and men to do better work without thought of food or sleep. Many obstacles and difficulties which were constantly appearing, were finally conquered by the almost superhuman efforts of our men, for it



LIEUT.-COL. JAMES F. CLARKE, Commander Hospital Unit R.
Fairfield, Iowa

Served throughout Spanish War, Major and Surgeon 49th Iowa Vol.
Inf., Florida and Cuba.

Organized Hospital Unit R. in Southeast Iowa.

Entered service August 20, 1917.

Took Hospital Unit R. overseas February 16, 1918.

Chief of operating team No. 23 France.

Sometime Commanding Officer Base Hospital No. 32 American Red
Cross, Military Hospital No. 5.

Returned overseas April 18, 1919.

Discharged May 10, 1919.

must be remembered that each man was doing the work of six. Additional help from the army seemed impossible on account of the shortage at this time of hospital corpsmen.

While the number of wounded here exceeded anything seen later, the character of the wounds were not so severe and gas gangrene was less in evidence. We received practically all of the cases from the Belleau Woods fight, which were mostly rifle and machine gun wounds.

An exhaustive history of the organization would be out of place here, therefore, it may suffice to give a brief outline of what happened after the stand at Coulommiers.

On July 29, 1918, the organization was ordered to Chateau Thierry by truck and within thirty hours, patients were being operated at the new point. The day we left Coulommiers, 1200 wounded were lying on the ground for Evacuation Hospital No. 7 to handle.

At Chateau Thierry, the wounds were more severe, from high explosive to shrapnel. Fracture cases were evacuated by boat down the Marne River to Paris, while the remaining were distributed to hospitals in the rear.

Our position at this point was more exposed than at any other time, except perhaps at Fromereville. Shock from exposure was not so pronounced as later, due to the hot weather. An epidemic of diarrhoea and millions of flies and bees, made this stand a most disagreeable nightmare.

Orders were received August 20 for Mobile Hospital No. 1 to move via Neufchateau to La Morlette Ambulance, a group of French huts one kilometer west and four south of Verdun. Here,

patients from the Saint Mihiel drive were attended.

After the St. Mihiel drive, we were ordered to proceed under camouflage at night to Claire Chene, five kilometers south of the line, preparatory to the new Meuse Argonne drive, and September 24 found us ready for patients.

After the barrage of this frightful morning, the most horribly mutilated wounded began to arrive. A field hospital triaged the severely wounded by litter to our institution, but 100 yards distant.

Here the task of litter bearer was stupendous, because of having to carry the wounded up a steep hillside where we had been placed for protection against direct shell fire.

The weather was cold, and wet, and here we found the cases of severe shock. Numbers died in the ambulances en route from the first aid stations. Here it was, too, that we used the German prisoners as litter bearers and grave diggers, and I must say that they performed excellent service.

To go on further would be tiresome to the reader. Suffice it to say that Mobile Hospital No. 1 followed all activities through the Chateau Thierry, St. Mihiel, and Meuse Argonne battles, making fourteen moves in all. No hospital, except the field, was ever ahead of Mobile One, and frequently these were in direct contact.

Armistice day found us at Bantheville, near Stenay, in the Argonne. We were not removed from the shell holes until Christmas eve, 1918, when orders were received to move back to Joinville, Haute Marne, turn in all equipment, and prepare for transportation to the United States.

However, we did not leave France until late in April, 1919. We were held at Toul and Nantes, during this time, without equipment or duties of any kind, except the conduct of the organization itself.

Following are the names of some of the medical officers, heads of operating teams, who were with us during the heavy drive at Coulommiers in the Spring of 1918: Lieut-Col. Robt. T. Miller, Major A. D. Babcock, Major H. G. Berry, Major Jas. A. Sherbondy, Capt. Beth Vincent, Capt. Elliott C. Cutler, Capt. Jas. Watt, U. S. N., Major Kellogg Speed, Maj. C. G. Heyd, Capt. J. G. Yocum, Maj. C. W. Hemmington, Maj. J. B. Jamieson, Maj. Dean Lewis, Maj. W. F. Baer, Maj. J. M. Price, Jr., Capt. Paul Martin, Capt. Armitage Whitman, Capt. Carlton R. Metcalfe, Maj. H. O. Bruggeman, Capt. B. S. Chaffee, Capt. J. T. Breakey, Maj. H. E. Ross, Maj. G. D. Davis.

Later, on other fronts, many more teams reported for duty under such men as: Maj. John L. Yates, Maj. Walter B. Cannon, Capt. M. H. Deffenbaugh, Capt. Benjamin Baer, Jr., Capt. C. A. Stone, Capt. A. B. Moore, Lieut. J. M. Venable, Lieut. R. H. Bryant, Lieut. Pierre R. Pinard, Maj. Wm. L. Verdi, Maj. Henry N. Torry, Capt. E. E. Archer, Capt. Chas. E. Dorman, Capt. M. A. Blankenhorn, Lieut. Edward F. Dombrowski, Lieut. K. D. Killen, Lieut. Hugh M. Sweeney, Lieut. John B. Webster, and many others. Besides these, a large number of officers, nurses, and men were permanently attached to the organization. Maj. F. E. Bellinger, headed a

team assisted by Capt. John S. McAtee, both of Council Bluffs.

Lieut. Jay DeP. Mingos, graduate of the army school of orthopœdics, was assigned to Mobile Hospital No. 1, from service in English Hospitals, as the head of a splint team, which confined its work to the care of all fractures. Capt. Bruce L. Gilfillan, of Keokuk, served with the permanently attached personnel, from a line organization of engineers.

In the x-ray department of the hospital, such men as Capt. Norman C. Prince of Omaha, Capt. Arthur K. Owen of Topeka, Lieut. Samuel S. Gaillard and Lieut. William H. Cade served at various times.

Capt. E. H. Falconer and Lieut. Charles H. Nammack headed teams whose duties were specially confined to the care of cases of extreme shock.

Maj. Rea P. McGee of Denver, joined the organization at Chateau Thierry and remained as the maxillo-facial surgeon of the hospital until its station at Nantes.

Some of the other officers who were temporarily attached to Mobile Hospital No. 1 in surgical capacities were: Maj. V. P. Blair, Maj. Sydney R. Burnap, P. A. Surgeon, C. G. Ross, United States Navy, Capt. C. D. Rice, Maj. H. Berry, Maj. Henry C. Berry, Lieutenant Paule Steel, Captain W. W. Burnes, Lieut. Hart Goodloe, Lieut. H. G. Fulton, Capt. A. H. Montgomery, Lieut. Fred H. Hyner, Lieut. D. W. Clark, Capt. James W. Robinson, Capt. L. D. James, Lieut. L. W. Hughes, Lieut. C. M. Reed, Lieut. G. P. Panelek, Lieut. J. M. Speed,



FRANK L. WILLIAMS

Captain, Medical Corps, 168th Infantry, 42nd Division
Length of service, two years and three months

Lieut. W. D. McGrath, Capt. C. E. Dowman, Capt. C. A. Stone, Capt. Robert C. Drane, Lieut. A. S. McCown, Lieut. Clyde F. Baccus, Capt. M. H. Deffenbaugh, Lieut. W. N. Rogers, Capt. Truman G. Schnabel, Lieut. John H. Wagner, Maj. William Stickney, Maj. S. Stewart, Lieut.-Col. E. G. Brackett, Maj. John W. Price, Maj. Chas. W. Hall, Lieut. Joseph Engelson, Capt. Leonard Crosby, Lieut. Walter C. Burket, Lieut. Thomas Scott, Lieut. W. D. McGrath, Lieut. B. W. McKenzie, Lieut. A. C. Gray, Lieut. Robert Lovelady, Capt. Jas. G. Yocum, Lieut. C. H. Moses, Lieut. G. P. Sackrider, Capt. A. P. Jones, Lieut. Jack S. Hundley, Lieut. W. B. Goddard, Capt. J. W. Roberts, Capt. J. T. Gwathmey, Capt. W. S. Middleton, Lieut. McKeen Cattell, Lieut. J. B. Close, Capt. E. E. Archer, Capt. A. B. Moore, Capt. Cecil G. Morehouse, Capt. Blake F. Donaldson, Maj. C. F. Nassau, Lieut. L. D. Englerth, Capt. Quincy B. Lee, Capt. Frederick Sallender, Capt. Chas. M. Ashley, Lieut. Joseph Binder, Lieut. Floyd H. Jones, Capt. M. D. Hoyt, Capt. A. B. Hromadka, Lieut. Harry O. Pollock, Lieut. M. E. Withrow, Capt. Orlow C. Snyder, Lieut. Samuel Butler, Capt. Roy W. Hammack, who assisted with pathology.

Brief summary of conclusions received as the result of our experience with nearly 7,000 non-transportable cases operated follows:

Debridement, carefully performed, is the only method of overcoming gas gangrene.

Primary suture of extremities should be reserved for quiet times, when the patient can be kept under constant observation for at least eighteen days.

For mobile, or frontline evacuation hospitals, debridement, wide open treatment *without* suture, with the addition of Dakin solution is best, with the idea of early transportation to the rear, for the delayed primary suture is necessary.

Heads and spines before operation stand transportation well, and should not be operated in advanced surgical units.

Perforating wounds of the chest, from rifle or machine guns, without complications, should be sent to the rear and let alone. Others should receive radical treatment, suture of lung, cleaning out pleural cavity, and suture of pleura without drainage. In advanced hospitals, foreign bodies in the lung, unless easily accessible, should be allowed to remain.

All abdominal cases should be opened if seen in the first twenty-four hours.

In joints, all foreign bodies and loose bones should be removed, synovial membrane and capsule sutured without drainage. After-treatment, should consist of early passive motion, (forty-eight hours). For infected joints, free incision, no drainage tubes, active and passive motion (constant), and patient should be allowed to walk about on crutches in a few days, if his condition permits.

Primary suture cases should not be transported for two or three weeks, except when war conditions demand, which was frequently the case with Mobile Hospital No. 1.

The Thomas splint in front-line hospitals is a great life and limb saver.

Face wounds require little or no debridement,

and every effort should be made early to place parts in as nearly perfect position as possible.

In cases of shock, selected blood or citrated blood for direct transfusion, best in cases requiring fluid, NaCl solution is good. Gum salt, with Mobile Hospital No. 1, did more harm than good, and its use was discontinued. Heat, saline drinks. Comfortable fixation of fractures.

For the prevention of shock; heat, arrest of hemorrhage, hot saline drinks, rest, should be encouraged as soon after the wound has been received as possible.

The writer is convinced that our army should inaugurate a system of field bed units, equipped with more elaborated heating devices, with plenty of hot saline drinks. Under these conditions, fewer cases of inoperable shock would be seen at the advanced surgical units.

In our experiences, with only the severe non-transportable to handle, nearly all badly wounded cases, gassed also, died.

In closing, the writer wishes to state that had he had the choice of positions in the American Expeditionary Forces, he would have selected the very one he was fortunate enough to draw.

Again, he was favored in having under his command, the most wonderful set of men and women ever assembled for any duty. To the latter, and to the direct cooperation of such men as Gen. M. W. Ireland, now surgeon general of the army, Col. E. H. Wadhams, Gen. J. M. T. Finney, Col. William L. Kellar, and others, I account for the unequaled record of this Iowa organization.

Without question, when the history of this great war is written, no page will be brighter than that written of the work and indefatigable devotion of the medical men, assisted by his wonderful nurses and men of the medical department.



EDGAR R. EARWOOD

Major, Medical Corps, 42nd Division and 1st Army Corps
Length of service, two years

LIST OF IOWA PHYSICIANS WHO HAVE
BEEN RECOMMENDED BY THE SUR-
GEON GENERAL FOR COMMISSIONS
IN THE MEDICAL OFFICERS RE-
SERVE CORPS AND ASSIGNED
TO DUTY

Acher, Albert Edward, 1st Lieut., Ft. Dodge.
Agnew, Fred F., Capt., Independence.
Alessi, Nicolo Vincenzo, 1st Lieut., Independence.
Allen, Larned Van Patten, 1st Lieut., Davenport.
Allen, Lloyd, Capt., Chariton.
Alt, Roy Colony, 1st Lieut., Cedar Rapids.
Amdor, William Franklin, 1st Lieut., Carbon.
Amick, Louis Burton, 1st Lieut., Millersburg.
Anderson, Paul Oren, 1st Lieut., Bouton.
Anderson, Harmont Nathaniel, 1st Lieut., Woodbine.
Anderson, Marion Ellsworth, 1st Lieut., Clinton.
Anspach, William Earl, 1st Lieut., Colfax.
Anthony, Walter H., 1st Lieut., Ottumwa.
Armentrout, Coral Ray, Capt., Keokuk.
Armitage, Albert Gieggle, 1st Lieut., Shenandoah.
Aschenbrenner, Carl, Capt., Pella.
Atkins, George Leslie, Capt., Superior.
Augustine, Grant, Capt., Minden.
Austin, Homer Moon, Capt., Wellman.
Ayers, Franklin Dewight, 1st Lieut., Sabula.
Ayres, Edward C., Capt., Lorimor.
Baird, Charles Glenn, Capt., Cedar Rapids.
Baker, John Elmer, 1st Lieut., Maynard.
Baldridge, John H., 1st Lieut., Batavia.
Bannister Murdoch, 1st Lieut., Ottumwa.
Banton, Oscar Herman, 1st Lieut., Nora Springs.
Bare, Elmer Anderson, Capt., Pleasantville.
Barnes, Benjamin Spafford, 1st Lieut., Shenandoah.
Barton, Hugh Pierce, 1st Lieut., Davenport.
Bartruff, Charles Henry, 1st Lieut., Reinbeck.
Barragy, Joseph Carroll, 1st Lieut., Mason City.

Bartlett, Clifford Loomis, 1st Lieut., Clinton.
 Baskin, Charles Llewelyn, 1st Lieut., Chariton.
 Battey, Percy Betterman, Capt., Independence.
 Battin, James Franklin, 1st Lieut., Marshalltown.
 Bawden, George Stephen, 1st Lieut., Davenport.
 Beatty, Jesse James, 1st Lieut., Farragut.
 Becker, Royal August, 1st Lieut., Anita.
 Beeh, Edward Francis, 1st Lieut., Ft. Dodge.
 Bellaire, Roy F., 1st Lieut., Sioux City.
 Bellinger, Frank Earl, Capt., Council Bluffs.
 Bemis, George Arthur, 1st Lieut., Garner.
 Bendixen, Peter Alfred, 1st Lieut., Davenport.
 Benedict, Edgar Pearl, 1st Lieut., Battle Creek.
 Benjamin, Howard Paul, 1st Lieut., Council Bluffs.
 Bernard, Ramsom Drips, 1st Lieut., Clarion.
 Bess, Thomas Floyd Ernest, 1st Lieut., Ft. Madison.
 Betts, William Henry, 1st Lieut., Madrid.
 Bevius, Nathan Sidney, 1st Lieut., Ft. Atkinson.
 Beye, Howard Low, 1st Lieut., Iowa City.
 Binder, Frederick, 1st Lieut., Corning.
 Binford, William Sherwood, 1st Lieut., Dixon.
 Blachley, T. W., 1st Lieut., Centerville.
 Black, John Roland, 1st Lieut., Jefferson.
 Blessin, Otto James, 1st Lieut., Postville.
 Block, Charles Earl, 1st Lieut., Davenport.
 Blocklinger, Albert Herman, Capt., Dubuque.
 Blything, Jefferson Duddleston, Capt., Bettendorf.
 Boetel, George Hans, 1st Lieut., Rock Rapids.
 Boggs, Nathan, Capt., New London.
 Bookhart, Edward Webster, 1st Lieut., Breda.
 Booker, Arthur John, 1st Lieut., Des Moines.
 Bowen, Frederick Stuber, 1st Lieut., Woodburn.
 Bowes, John Joseph, 1st Lieut., Livermore.
 Bowie, Cecil Claude, 1st Lieut., Dedham.
 Bowie, Louis L., 1st Lieut., Milo.
 Bowles, Frederick Wilson, 1st Lieut., Ottumwa.
 Bowman, Leonard James, 1st Lieut., Masonville.
 Bowman, Edward Sommet, Capt., Davenport.
 Boyd, Mark Frederick, 1st Lieut., Iowa City.



MAJOR THOMAS A. BURCHAM,
Sanitary Corps No. 10

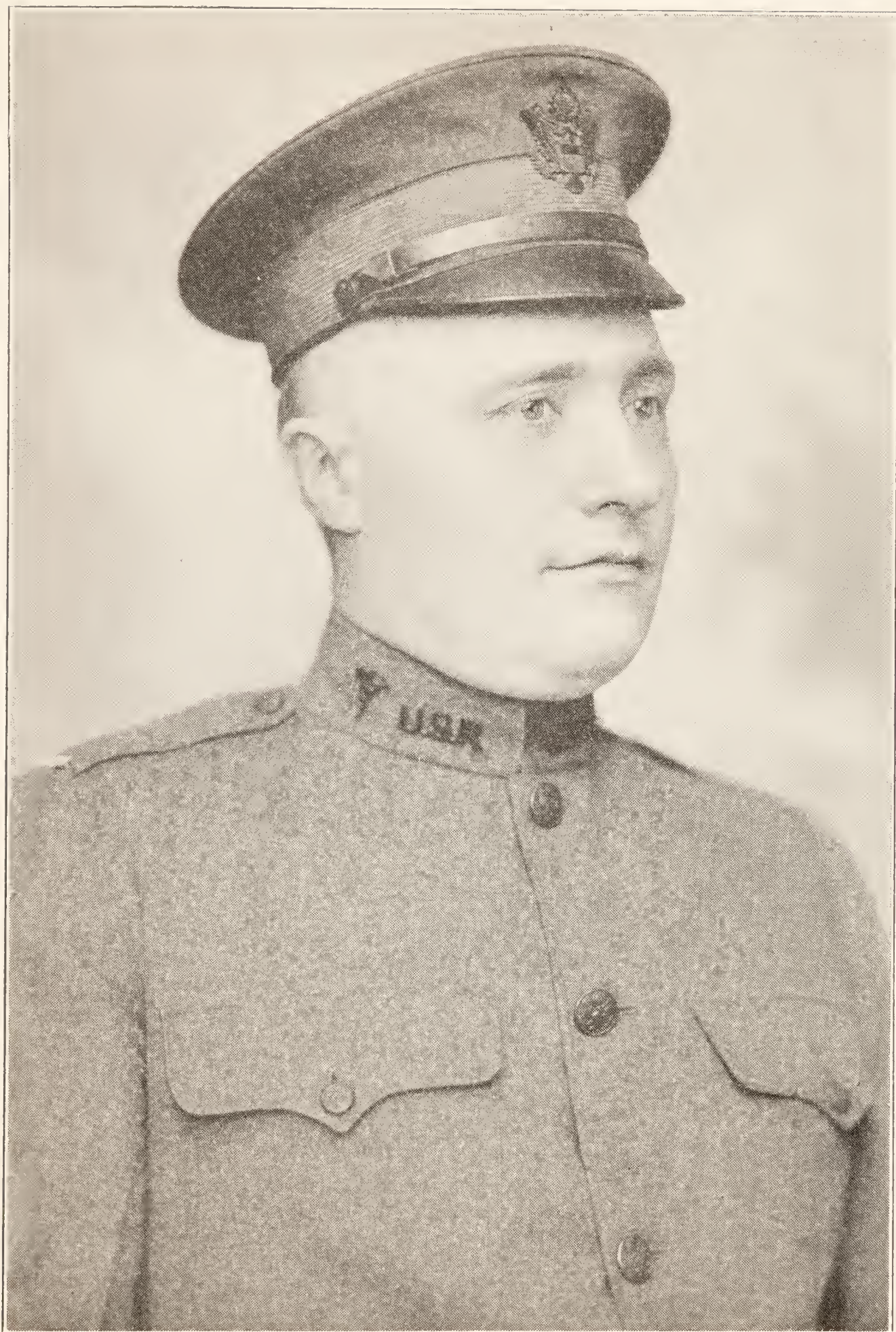
Entered service August 25, 1917
Sailed overseas October 18, 1917
Returned overseas January 26, 1919
Discharged from service March 7, 1919

Brackney, Herman John, Capt., Sheldon.
 Bradley, William, Capt., Leon.
 Brand, Rudolph M.
 Braunlich, George, 1st Lieut., Davenport.
 Brereton, Harold Linhoff, 1st Lieut., Emmetsburg.
 Brewer, Martin Theron, 1st Lieut., De Soto.
 Bridgman, Harry Lee, 1st Lieut., Columbia.
 Brinkman, John Edward, Capt., Waterloo.
 Brinkman, William Frederick, 1st Lieut., Des Moines.
 Brisbane, Royal Elis, 1st Lieut., Mason City.
 Brown, Harvey Lee, 1st Lieut., Ft. Des Moines.
 Brown, William Frank, 1st Lieut., Keokuk.
 Brown, William Ebenezer, 1st Lieut., Cedar Rapids.
 Browne, Arthur Davis (colored) 1st Lieut., Ft. Des
 Moines.
 Browning, George Stillman, Capt., (deceased), Sioux
 City.
 Brownson, Jason Daniel, Capt., Monona.
 Brownson, Orestes Augustine, 1st Lieut., Dubuque.
 Bruce, James Hugh, 1st Lieut., Dickens.
 Brush, Milo Orion, 1st Lieut., Shenandoah.
 Bryant, William Henry, 1st Lieut., Ft. Des Moines.
 Buck, Samuel Cory, Capt., Grinnell.
 Burcham, Thos. A., Major, Des Moines.
 Burchett, Edwin, 1st Lieut., Seymour.
 Burke, Charles Bernard, Capt., Atlantic.
 Burke, Thomas Allen, 1st Lieut., Mason City.
 Burke, Charles Henry, 1st Lieut., Algona.
 Bush, Earl B., Major, Ames.
 Byers, Albert Garfield, 1st Lieut., Albia.
 Cady, Clinton Colfax, 1st Lieut., Harris.
 Cahill, John Alysus, 1st Lieut., Volga City.
 Caldwell, J. Willard, 1st Lieut., Steamboat Rock.
 Caldwell, Jay S., 1st Lieut., Lenox.
 Callahan, Bernard Joseph, Capt., Des Moines.
 Campbell, Malcolm Samuel, 1st Lieut., Malvern.
 Campbell, Claude Melville, Capt., Decorah.
 Cantonwine, Emtellis Augustus, Capt., Dubuque.
 Cantwell, John Dalzell, 1st Lieut., Davenport.

Carberry, Elmer Andrew, 1st Lieut., Maynard.
 Carey, Francis Stephen, 1st Lieut., Williams.
 Carey, Leland Oren, 1st Lieut., Des Moines.
 Carmody, Thomas James, 1st Lieut., Wesley.
 Carney, Samuel David, Capt., Sioux City.
 Carpenter, William Sanford, Capt., Des Moines.
 Carpenter, Lenora, Red Cross Service, Des Moines.
 Carr, Leslie Louis, 1st Lieut., Clermont.
 Carter, Raymond Holmes (colored) 1st Lieut., Ft.
 Des Moines.
 Carver, William Franklin, Capt., Ft. Dodge.
 Carver, Harry Everette, 1st Lieut., Rose Hill.
 Caughlan, Gerald Vaughn, 1st Lieut., Pacific Junc.
 Cauley, Francis Patrick, 1st Lieut., Anthem.
 Charlton, Albert John, 1st Lieut., Lowden.
 Chase, Sumner Bereman, 1st Lieut., Ft. Dodge.
 Cheney, Louis Dwight, 1st Lieut., Sioux City.
 Chenoweth, Charlie Everette, 1st Lieut., Iowa City.
 Chesnutt, Thomas Henry, 1st Lieut., Mt. Pleasant.
 Chester, Walter Simmons, 1st Lieut., Britt.
 Christensen, John Raymond, Capt., Eagle Grove.
 Christy, Edgar, Capt., Hastings.
 Clapsaddle, John Guy, 1st Lieut., Burt.
 Clark, Leslie William, 1st Lieut., Chester.
 Clark, Frank H., Capt., Clarinda.
 Clark, Oliver Thaddeus, 1st Lieut., Keokuk.
 Clarke, James Frederic, Lieut.-Col., Fairfield.
 Clary, William Henry, 1st Lieut., Prescott.
 Cleaver, Gean Dutton, 1st Lieut., Council Bluffs.
 Cleaves, Prentiss Bowden, 1st Lieut., Cherokee.
 Cobb, Elliott Cunningham, 1st Lieut., Sioux City.
 Cody, William Ellsworth, 1st Lieut., Merrill.
 Coffey, Lee Matthew, Capt., Keokuk.
 Coffin, Lonnie A., 1st Lieut., Farmington.
 Cogswell, Jr., Charles Herbert, Capt., Cedar Rapids.
 Cole, James Fay, Capt., Oelwein.
 Collester, Charles Chapman, 1st Lieut., Spencer.
 Collins, James Love, 1st Lieut., Sheffield.
 Conkling, Wilbur Scott, Lieut.-Col., Des Moines.

Conn, Harold Russell, 1st Lieut., Cedar Rapids.
 Conrad, Albert Everett, Capt., Decorah.
 Conway, Aaron Clyde, 1st Lieut., Marshalltown.
 Cooper, William Alonzo, 1st Lieut., Bayard.
 Cooper, James Swaney, 1st Lieut., Burlington.
 Corbin, Sylvanus Weston, 1st Lieut., Millerton.
 Corlett, Matthias Southward, 1st Lieut., Westgate.
 Cornell, Corwin Schaffner, Major, Knoxville.
 Cornish, Louis Alexander (colored) 1st Lieut., Ft.
 Des Moines.
 Corns, William, 1st Lieut., Montour.
 Couper, Edward Alexander, 1st Lieut., Britt.
 Courshon, Benjamin, Capt., Sioux City.
 Craven, Lawrence Lewellyn, Capt., East Peru.
 Cremin, William J. S., 1st Lieut., Sioux City.
 Cressler, Frank Ernest, Capt., Churdan.
 Crow, Ira Nelson, Capt., Marengo.
 Crow, G. B., Lieut.-Com., Burlington.
 Crumpton, Robert Cochran, 1st Lieut., Webster City.
 Cruzen, John Lewis, 1st Lieut., Lacona.
 Cummings, William Cyrus, 1st Lieut., Ryan.
 Curry L. T., Major, Waterloo.
 Cutler, Frank Ross, 1st Lieut., Guttenberg.
 Dahl, Peter I., 1st Lieut., Inwood.
 Daly, James Joseph, Capt., Decorah.
 Daly, William Thomas, Capt., Cresco.
 Danley, Royal Clark, 1st Lieut., Hamburg.
 Darche, Alexander Louis, 1st Lieut., Woodward.
 Daut, Walter William, 1st Lieut., Muscatine.
 Davis, Jr., Charles Frank, 1st Lieut., Mt. Pleasant.
 Davis, Austin Clifford, 1st Lieut., Iowa City.
 Day, Philip Miller, 1st Lieut., Keokuk.
 Decker, Herbert Morgan, Capt., Davenport.
 Deering, Albert Benson, Capt., Boone.
 Dennison, John Chase, Capt., Bellevue.
 DePree, Seine Bolks, Capt., Sioux Center.
 Detchon, Hugh Smith, 1st Lieut., Victor.
 Dewey, Christian Henry, Major, Perry.
 Dierker, Frank Henry, 1st Lieut., West Point.

Dilley, Harry Horace, 1st Lieut., Des Moines.
 Dingman, Marshal Edwin, 1st Lieut., Urbana.
 Diven, Wilber, 1st Lieut., Iowa City.
 Dixon, John Wesley, Capt., Burlington.
 Donahue, Julia, U. S. Laboratory Service, Burlington.
 Donohue, George, Major, Cherokee.
 Dorsey, Thomas James, 1st Lieut., Clare.
 Doty, Clarence Hayes, Capt., Center Point.
 Downing, James Arthur, Capt., Des Moines.
 Drake, Franklin Joseph, 1st Lieut., Webster City.
 Draper, Walter E., Major, Manilla.
 Druet, Arthur Lewis, 1st Lieut., Larchwood.
 Duffield, Thomas J., Major, Clarinda.
 Duhigg, Thomas A., Major, Navy, Des Moines.
 Dunlap, Wallace Ashbury, Capt., Des Moines.
 Dunlavey, 1st Lieut., Logan.
 Dunn, James, 1st Lieut., Davenport.
 Dunning, Milo Benjamin, Capt., Conway.
 Dunshee, Jay Dee, 1st Lieut., Harlan.
 Dyer, Benjamin George, Capt., Ames.
 Easton, M. T., Major, Conway.
 Eaton, Richard Gardner, Capt., Cherokee.
 Ebersole, Francis Fisher, Capt., Mount Vernon.
 Edgerly, Edward T., Major, Ottumwa.
 Edgington, James Everett, 1st Lieut., Washington.
 Egloff, William Jacob, Capt., Mason City.
 Elder, John William, 1st Lieut., Des Moines.
 Enfield, Charles Darwin, 1st Lieut., Jefferson.
 Erskine, Arthur Wright, 1st Lieut., Cedar Rapids.
 Eslick, Louis Edward, 1st Lieut., Rockwell City.
 Evans, Evan Stark, Capt., Grinnell.
 Evens, Leo Erwin, Capt., Waterloo.
 Everall, Bruce Bilo, 1st Lieut., Monona.
 Fagen, Rodney P., Lieut.-Col., Des Moines.
 Fairchild, Jr., David Sturges, Colonel, Clinton.
 Farlow, Charles Troy, 1st Lieut., Yetter.
 Feightner, Robert Floyd, 1st Lieut., Ft. Madison.
 Felder, William W., 1st Lieut., Ft. Des Moines.



DANIEL J. GLOMSET

Went on duty as First Lieutenant at Rockefeller Institute, July 20, 1917

Camp Dodge from August 20, 1917 to June 1, 1918

Promoted to Captain, October, 1917

Promoted to Major, March, 1918

Overseas from June 1, 1918 to February 7, 1919

Discharged February 20, 1919

Felt, Garnett Smith, 1st Lieut., New Providence.
 Fenton, Willard Joshua, 1st Lieut., Mystic.
 Ferguson, Sereno Marcellus, 1st Lieut., Avoca.
 Fettes, James Murray, 1st Lieut., Le Mars.
 Ficke, Emil Otto, Capt., Davenport.
 Fillmore, Jr., Rollin Slossen, 1st Lieut., Corwith.
 Finley, Walter George, 1st Lieut., Mondamin.
 Findley, Park A., Capt., Des Moines.
 Fisher, Charles Sumner, 1st Lieut., Ft. Des Moines.
 Fitzgerald, E. T., Capt., Boone.
 Fitzpatrick, Matthew Joseph, 1st Lieut., Mason City.
 Flageolle, Joseph, W. B., 1st Lieut., Sioux City.
 Fleischman, Abraham George, 1st Lieut., Des
 Moines.
 Fletcher, Frederick William, 1st Lieut., Thurman.
 Foley, Walter Edward, 1st Lieut., Davenport.
 Fonda, James William, 1st Lieut., Defiance.
 Foster, Wayne Jones, 1st Lieut., Iowa City.
 Fox, Walter Henry, Capt., Waucoma.
 Franchere, Chetwynd Marr, 1st Lieut., Mason City.
 Frank, George Washington, Capt., Buffalo.
 Fraser, Walter, 1st Lieut., Algona.
 Freeman, Milton Joseph, 1st Lieut., Carroll.
 Fritz, Lafayette Helmuth, 1st Lieut., Dubuque.
 Fruitnight, Henry S., 1st Lieut., Iowa City.
 Fruth, Harold Edgar, 1st Lieut., Muscatine.
 Fuller, Frank Manely, Capt., Keokuk.
 Fulliman, Jr., Edmond Bland Ballard, 1st Lieut.,
 Muscatine.
 Gaffey, Frank Harold, 1st Lieut., Bradgate.
 Gaillard, Samuel S., 1st Lieut., Perdue Hill.
 Gallagher, D. J., Capt., Iowa City.
 Galloway, Milton Blythe, Capt., Webster City.
 Canoe, James Orval, Capt., Ogden.
 Gardner, John Raphael, Capt., Lisbon.
 Garrett, John Milton, Capt., Fort Dodge.
 Geiger, Ulysses Simpson, 1st Lieut., North English.
 Geissinger, John De Walt, Capt., Spirit Lake.
 George, Abel Benson, Capt., Red Oak.

Gernsey, Merritt Nelson, 1st Lieut., Waverly.
 Gibson, George, 1st Lieut., Lehigh.
 Gilfillan, Bruce Lock, Major, Keokuk.
 Gillett, Francis Andrew, 1st Lieut., Fremont.
 Gilpin, George Sealey, 1st Lieut., Des Moines.
 Gittins, Thomas Roy, 1st Lieut., Iowa City.
 Given, Milton Abe, 1st Lieut., Des Moines.
 Glew, Percival Bainbridge, 1st Lieut., Dallas Center.
 Glomset, Daniel Johnson, Major, Des Moines.
 Glynn, Charles Edward, Capt., Davenport.
 Golden, Thomas Vincent, 1st Lieut., Creston.
 Gottsch, Erwin Julius, Capt., Le Mars.
 Gordon, William Noll, 1st Lieut., Rowan.
 Gould, George Richard, 1st Lieut., Conrad.
 Graber, Fred J., 1st Lieut., Stockport.
 Graham, Evarts Ambrose, Capt., Mason City.
 Graening, Charles Henry, 1st Lieut., Waverly.
 Grant, Cecil Charles, 1st Lieut., Hudson.
 Gratiot, Harvey B., Capt., Dubuque.
 Grau, A. G., 1st Lieut., Storm Lake.
 Gray, Henry Arthur, Capt., Keokuk.
 Gregg, John B., Capt., Iowa City.
 Gregory, Ross Holland, Capt., Creston.
 Griffin, Frank Leo, 1st Lieut., Baldwin.
 Griffin, William Leighton, 1st Lieut., Charles City.
 Griffin, John M., Albia.
 Grimwood, Walter Harry, 1st Lieut., Ft. Madison.
 Grove, Emil Gustav, 1st Lieut., Fairfield.
 Guernsey, Paul Francis, 1st Lieut., Bloomfield.
 Gutch, Roy Clark, 1st Lieut., Chariton.
 Gutch, Thomas Ernest, 1st Lieut., Albia.
 Guthrie, James Kuykendall, 1st Lieut., Ringsted.
 Hadley, Elmer Burton, 1st Lieut., Waterloo.
 Hagedorn, Harry Herbert, 1st Lieut., Sioux City.
 Hall, Guy Jerome, 1st Lieut., Keokuk.
 Halliman, Edward Leo, 1st Lieut., Clinton.
 Hamilton, Jr., Benjamin Charles, 1st Lieut., Jefferson.
 Hammer, Le Roy Aaron, 1st Lieut., Ottumwa.
 Hand, William Cory, 1st Lieut., Hartley.

Hanna, John Thomas, 1st Lieut., Kellogg.
 Hannah, Ward, 1st Lieut., Webster City.
 Hansen, Hans, Capt., Logan.
 Harkness, Gordon Follette, Capt., Davenport.
 Harlan, Charles Davis, Capt., Keswick.
 Harman, Clarence, 1st Lieut., Whiting.
 Harman, Dean Willard, 1st Lieut., Tripoli.
 Harnagel, Edward John, Capt., Des Moines.
 Harned, Calvin Waldo, Major, Des Moines.
 Harris, Ray Rhinalds, 1st Lieut., Dubuque.
 Harris, Edwin Ewell, Capt., Grinnell.
 Harris, William Alfred, 1st Lieut., Ft. Des Moines.
 Harris, William, 1st Lieut., Moravia.
 Hartman, Evert Clarence, 1st Lieut., Algona.
 Hartwell, Samuel Willard, 1st Lieut., New Sharon.
 Hasek, Victor Hugo, 1st Lieut., Cedar Rapids.
 Hawkins, Emmet Lefevre, 1st Lieut., Mineola.
 Hazzard, Charles M., 1st Lieut., Arlington.
 Healy, Maurice Arthur, Capt., Boone.
 Heard, Jr., Thomas Marsden, Capt., Sioux City.
 Hearst, William L., Capt., Cedar Falls.
 Heise, Carl August, 1st Lieut., Missouri Valley.
 Henely, Edmund, Capt., Nora Springs.
 Henneger, William Andrew, 1st Lieut., La Motte.
 Hennessey, Albert Vincent, Capt., Council Bluffs.
 Hennessey, Maurice Charles, 1st Lieut., Council
 Bluffs.
 Henninger, Louis Le Roy, Capt., Council Bluffs.
 Henry Rex Vale, 1st Lieut., Hedrick.
 Hermence, George Earl, 1st Lieut., Marshalltown.
 Herrick, Thomas Blenhard, Capt., Manson.
 Herrick, John Francis, Capt., Ottumwa.
 Herrick, Rupert Connor, 1st Lieut., Gilmore City.
 Herrman, Jr., Christian Henry, 1st Lieut., Amana.
 Heusinkveld, Henry John, 1st Lieut., Clinton.
 Hexom, John Daniel, 1st Lieut., Decorah.
 Hickman, Charles Stephen, 1st Lieut., Centerville.
 Hill, Chalmers Alexander, Capt., Council Bluffs.
 Hill, George Ray, Capt., Charter Oak.

Hill, Julia F., U. S. Gr. Hospital, Ft. McPherson,
 Ga., Des Moines.
 Hinshaw, Sylvester Ellsworth, Capt., Newton.
 Hoag, Harry Martin, Capt., Mason City.
 Hobby, Edwin Elmer, Capt., Iowa City.
 Hobson, Thomas Alexander, 1st Lieut., Parkersburg.
 Hoffman, William Louis, 1st Lieut., Gilbert.
 Hoffman, Alfred Anthony, 1st Lieut., Waterloo.
 Hoit, Jefferson Newton, 1st Lieut., Rockwell City.
 Holbrook, Francis Roderick, Capt., Des Moines.
 Hollis, Edward L., 1st Lieut., Rolfe.
 Hombach, William Henry, 1st Lieut., Remsen.
 Hooper, Lester E., 1st Lieut., Beech.
 Hooper, Martin Luther, 1st Lieut., Indianola.
 Hoover, Alden Robbins, Capt., Des Moines.
 Hough, Frank Sherman, Capt., Sibley.
 Householder, Harold A., 1st Lieut., Winthrop.
 Houston, Bush, 1st Lieut., Nevada.
 Houten, H. L., Capt., Ft. Des Moines.
 Howard, William Henry, 1st Lieut., Strawberry
 Point.
 Howard, William Arthur, 1st Lieut., Cherokee.
 Howe, Lysle Clarence, 1st Lieut., Milton.
 Hubbard, Frank Albert, 1st Lieut., Columbia Junct.
 Hubbard, William Marvin, 1st Lieut., Rembrandt.
 Huber, Simon Andrew, Capt., Charter Oak.
 Huff, Leoman D., 1st Lieut., Lenox.
 Huisenga, Richard, Capt., Rock Valley.
 Hull, James Apperson, Capt., Ottumwa.
 Hull, Henry Clay, Capt., Washington.
 Hunt, Hiram Henry, 1st Lieut., Hazelton.
 Huston, Daniel Farrel, 1st Lieut., Columbus Junct.
 Huston, Herbert Marc., 1st Lieut., Ruthven.
 Huston, Samuel Wesley, 1st Lieut., Crawfordsville.
 Ingersoll, Perry Grant, 1st Lieut., Dunlap.
 Irvin, Harry Clay, 1st Lieut., Adel.
 Jackson, Raymond Nathaniel (colored), 1st Lieut.,
 Ft. Des Moines.
 Jacobs, Thomas Dana, 1st Lieut., Morley.



CAPT. C. N. O. LIER

Jaenicke, Kurt, Major, Clinton.
 James, Charles Stephen, Capt., Centerville.
 James, Lora Douglas, Capt., Fairfield.
 Jaynes, Edwin Thompson, Capt., Waterloo.
 Jenkinson, Harry Rogers, 1st Lieut., Iowa City.
 Jenks, William Henry, Capt., Tipton.
 Jepson, William, Major Sioux City.
 Jewell, Milton Dana, 1st Lieut., Decorah.
 Johnson, Chester Harvey, 1st Lieut., Cherokee.
 Johnson, George Monroe, Capt., Marshalltown.
 Johnson, Kenneth L., 1st Lieut., Oskaloosa.
 Johnson, William Garfield, 1st Lieut., Princeton.
 Johnston, William Howard, 1st Lieut., Muscatine.
 Jones, Sydney David, 1st Lieut., Ft. Dodge.
 Jones, Mary Clyde, Capt., Boone.
 Jones, Charles Lee, Major, Gilmore City.
 Jones, Harry Jacob, Major, North English.
 Joynt, Michael Francis, 1st Lieut., Marcus.
 Kaasa, Lawrence J., Capt., Lake Mills.
 Kail, Carl, 1st Lieut., Stratford.
 Katherman, Charles Augustus, Capt., Sioux City.
 Kearney, Charles Atwell, Capt., Dubuque.
 Keech, Roy Kneale, 1st Lieut., Cedar Rapids.
 Keefe, Frank Milos, 1st Lieut., Clinton.
 Keefe, Patrick Eugene, 1st Lieut., Sioux City.
 Kellogg, Charles Elmer, 1st Lieut., Shenandoah.
 Kellogg, Orson Arza, 1st Lieut., Dows.
 Kemp, Malcolm Edwin, 1st Lieut., Sigourney.
 Kennedy, Charles Stephen, Capt., Logan.
 Keogh, John Victor, Capt., Dubuque.
 Kerstin Ernest M., Fort Dodge.
 Kessell, James E., 1st Lieut., Des Moines.
 Ketchum, Philip Vial, 1st Lieut., Elkhart.
 Kiesling, Harry Franklin, 1st Lieut., Dayton.
 Kilborne, Jay Melanethon, Capt., Sioux City.
 Kimmel, Elmer Ellsworth, 1st Lieut., Iowa City.
 King, David Oliver, 1st Lieut., Eldora.
 King, Thomas Wayne, 1st Lieut., Maloy.
 King, Oran West, Major, Montezuma.

King, Elliott R., Capt., Letts.
 King, Frank Ray, Capt., Farmersburg.
 Kinnaman, Clarence Horace, 1st Lieut., Keokuk.
 Kirkwood, Robert Carnahan, 1st Lieut., Coulter.
 Kleinberg, Henry Edward, 1st Lieut., Redfield.
 Knepper, Joseph John, 1st Lieut., Ames.
 Knipe, James Bolton, 1st Lieut., Armstrong.
 Koch, George William, Capt., Sioux City.
 Konigmacher, Adam Hiesland, 1st Lieut., Missouri
 Valley.
 Krejsa, Oldrich, Capt., Cedar Rapids.
 Kresensky, Walter W. A., 1st Lieut., Greeley.
 Kuhn, Leo Cornelius, 1st Lieut., Chariton.
 Kulp, Raymond Raney, 1st Lieut., Davenport.
 Lacey, Thomas Bigelow, Capt., Glenwood.
 La Force, Edward Francis, Capt., Burlington.
 Laird, John W., 1st Lieut., Mt. Pleasant.
 Lamb, Frederick Howe, Capt., Davenport.
 Lambach, Frederick, Capt., Davenport.
 Lambert, Elmer John, 1st Lieut., Ottumwa.
 Lampe, Elmer Lewis, 1st Lieut., Bellevue.
 Lang, Corvus C., 1st Lieut., Altoona.
 Langworthy, Solon Mitchell, 1st Lieut., Cedar
 Rapids.
 La Pina, Francis, Capt., Des Moines.
 Latchem, Raymond Lee, 1st Lieut., Walnut.
 Lauder, Clark Hays, 1st Lieut., Grinnell.
 Lebagh, Nicholas Walter, 1st Lieut., Mystic.
 Lee, Edwin Henry (colored), 1st Lieut., Ft. Des
 Moines.
 Leehey, Florance Patrick, Capt., Oelwein.
 Lehman, Emery Eilfred, 1st Lieut., Des Moines.
 Leir, Charles Nicholas Olsen, Capt., Des Moines.
 Leonard, Frederick Sylvester, 1st Lieut., Cascade.
 Leonard, Earl Renshaw, 1st Lieut., Rock Valley.
 Lesan, Cassius True, Capt., Mount Ayr.
 Lewis, Eugene R., Lieut.-Col., Dubuque.
 Lincoln, Simon Emanuel, Capt., Des Moines.
 Lindsay, Samuel Connell, Capt., Independence.

Linehan, Lewis Joseph, 1st Lieut., Dubuque.
 Littig, John Vincent, Major, Davenport.
 Loes, Anthony Michael, 1st Lieut., Dubuque.
 Lohr, Oscar Clare, 1st Lieut., Churdan.
 Long, Thomas Lee, Capt., Woodward.
 Long, Walter Klingeman, Capt., Hampton.
 Loosbrock, John Francis, 1st Lieut., Ft. Des Moines.
 Losh, Clifford Welcome, Capt., Des Moines.
 Lott, Robert Henry, 1st Lieut., Waverly.
 Lott, Guy Alexander, 1st Lieut., St. Ansgar.
 Love, Francis Leonard, Major, Iowa City.
 Lowrey, Claude Edwin, 1st Lieut., Centerville.
 Lucast, Thomas, Capt., Forrest City.
 Lugar, Laurell Lavergne, 1st Lieut., Corydon.
 Luginbuhl, Christian Bateman, Capt., Des Moines.
 Lundvick, Arthur Wesley, 1st Lieut., Gowrie.
 Luse, Ralph Frank, 1st Lieut., Low Moor.
 Lusk, Everett Edwin, Capt., Missouri Valley.
 Lynch, George Daniel, 1st Lieut., Moravia.
 Lynch, Robert James, Capt., Des Moines.
 Lyon, William Edwin, 1st Lieut., Garden Grove.
 Lyon, Morton, 1st Lieut., De Witt.
 Lyons, Charles W., Major, Marne.
 Lythcott, Geo. Ignatius (colored), 1st Lieut., Ft. Des
 Moines.
 Lytle, Carl Carruth, 1st Lieut., Lansing.
 McAllister, James, 1st Lieut., Battle Creek.
 McAllister, Fred J., Capt., Hawarden.
 McAtee, John Stephen, 1st Lieut., Council Bluffs.
 McBride, James Thomas, 1st Lieut., Des Moines.
 McCaffrey, Eugene Henry, 1st Lieut., Maquoketa.
 McCall, John Harvey, 1st Lieut., Allerton.
 McCall, Harry Ernest, Capt., Clearfield.
 McCaughan, Thomas Elsie, Capt., Ireton.
 McCauliff, Guy Thomas, Major, Webster City.
 McCarthy, Daniel Jos., Major, Davenport.
 McClean, Earl Dermard, Capt., Oskaloosa.
 McConnaughey, James Terry, 1st Lieut., Winfield.
 McConnell, Guthrie, Capt., Waterloo.

McCreight, Arthur Henry, Capt., Fort Dodge.
 McDonald, James Edward, Capt., Mason City.
 McDowell, Gilbert Thompson, Capt., Gladbrook.
 McElderly, Donald, 1st Lieut., Ottumwa.
 McFaul, William Darwin, Capt., Miles.
 McGrew, Oliver W., 1st Lieut., Grandview.
 McGuire, Roy Alvin, 1st Lieut., Brighton.
 McGuire, Clarence Ambrose, 1st Lieut., Dubuque.
 McIntyre, John Archibald, Capt., Walcott.
 McKinley, Alexander Daniel, Capt., Des Moines.
 McKirahan, Josiah Ralph, Capt., Perry.
 McKone, James W., Lawler.
 McLaughlin, A. J., Major, Sioux City.
 McLaughlin, Philip Benedict, Major, Sioux City.
 McLaughlin, Charles William, Capt., Washington.
 McMahan, Thomas, 1st Lieut., Iowa City.
 McNeil, Benjamin F., 1st Lieut., Charles City.
 McPherrin, Henry Ira, Capt., Perry.
 McVay, Melvin Josiah, 1st Lieut., Lake City.
 Mackey, Charles Andrew, 1st Lieut., Centerville.
 MacNaughton, Luther Damon, 1st Lieut., Eagle
 Grove.
 Mackin, Mitchell Charles, 1st Lieut., Knoxville.
 Macrae, Jr., Donald, Colonel, Council Bluffs.
 Magoun, Charles Elmer, 1st Lieut., Sioux City.
 Mahan, Horace Porter, 1st Lieut., Ellsworth.
 Maiden, Sydner Dale, 1st Lieut., Council Bluffs.
 Manahan, Charles Albert, 1st Lieut., Marengo.
 Maresh, George, 1st Lieut., Riverside.
 Maris, Gerrit, 1st Lieut., Hull.
 Marker, John Israel, 1st Lieut., Centerville.
 Martin, Loran Marshall, 1st Lieut., Fort Dodge.
 Martin, Edgar Harvey, 1st Lieut., Ft. Des Moines.
 Martin, James Lemuel, 1st Lieut., Ft. Des Moines.
 Martin, Ulysses Grant Baldwin, 1st Lieut., Ft. Des
 Moines.
 Martindale, Ed. L., Major, Clinton.
 Marston, Charles Lemuel, Capt., Mason City.
 Masson, Hervey Fulton, 1st Lieut., Washington.

Mathias, Daniel Francis, 1st Lieut., Audubon.
 Matson, John Archie, 1st Lieut., Tipperary.
 Matthews, Robert John, 1st Lieut., Clarinda.
 Mattison, Jr. G., 1st Lieut., Akron.
 Maxwell, John, 1st Lieut., Gibson.
 Maxwell, Charles Thomas, Capt., Sioux City.
 Mead, Frank Nathan, Capt., Cedar Falls.
 Meany, John Francis, 1st Lieut., Rockwell City.
 Mehler, Frank Raymond, 1st Lieut., New London.
 Mehlhop, Clarence Warren, Capt., Dubuque.
 Meigs, Benjamin Lyle, 1st Lieut., Fort Dodge.
 Mercer, Clifford David, 1st Lieut., West Union.
 Meredith, Loren Kenneth, 1st Lieut., Des Moines.
 Mereness, Herbert Dayton, Capt., Dolliver.
 Merritt, Edwin Atking, Capt., Council Bluffs.
 Meyer, Henry Edward, Capt., Hampton.
 Meyer, Albert Julius, 1st Lieut., Hawarden.
 Meyer, Valentine John, 1st Lieut., Defiance.
 Middleton, George McClelland, Capt., Davenport.
 Middleton, Edward D., Capt., Davenport.
 Middletown, Harry Ernest, 1st Lieut., Lake City.
 Miller, Fisher B. E., 1st Lieut., Cherokee.
 Miller, Chester Arthur, 1st Lieut., Nevinville.
 Miller, Roy Robert, 1st Lieut., Keota.
 Miller, Enos De Witt, 1st Lieut., Wellman.
 Miller, Brownlow Bartly, 1st Lieut., Tabor.
 Miller, Thomas Ezekiel, 1st Lieut., Ft. Des Moines.
 Mills, Frank Wilbur, 1st Lieut., Ottumwa.
 Mitchell, Clairemont Hogue, Capt., Leon.
 Moerke, Albert Charles, 1st Lieut., Burlington.
 Moershel, H. G., 1st Lieut., Homestead.
 Moes, Matthias Joseph, Capt., Dubuque.
 Molison, Robert Crichton, 1st Lieut., Marshalltown.
 Moon, Roy, Capt., Glenwood.
 Moore, Charles Everett, 1st Lieut., Newton.
 Morden, Roy Robert, Capt., Des Moines.
 Morehouse, Cecil G., 1st Lieut., Waukon.
 Morgan, John Edward, Capt., Oskaloosa.
 Morganthaler, Otis Philip, Major, Templeton.

Morrison, Edward D., Capt., Barnum.
 Morton, William Claspell, 1st Lieut., Iowa Falls.
 Morton, Matthew Taylor, 1st Lieut., Iowa City.
 Moth, Robert Shibley, 1st Lieut., Council Bluffs.
 Mott, William Henry, 1st Lieut., Farmington.
 Muench, Virgil Orin, 1st Lieut., Nichols.
 Mullarky, Hugh, Capt., Manson.
 Mulroney, Charles H., 1st Lieut., Ft. Dodge.
 Murphy, James Orvil, 1st Lieut., Eldon.
 Murphy, Walter Waugh, 1st Lieut., Lewis.
 Murphy, Frank George, 1st Lieut., Cedar Rapids.
 Murray, Meredith Byrne, 1st Lieut., Macedonia.
 Murray, Frederick Gray, Capt., Cedar Rapids.
 Myers, Judson William, 1st Lieut., Sheldon.
 Myers, E. W., Capt., Rolfe.
 Myrick, Eliel Grant, 1st Lieut., Fairfield.
 Naffziger, Armand, 1st Lieut., Merrill.
 Narrley, George Raymond, 1st Lieut., Keokuk.
 Nauess, Charles Edward, 1st Lieut., Waterloo.
 Negus, Alvah, Capt., Keswick.
 Nelson, Audley Emmet, 1st Lieut., Sidney.
 Nervig, Isaac Eugene, Capt., Sioux City.
 Newell, William Carl, Capt., Ottumwa.
 Newell, Floyd Wilmuth, 1st Lieut., Ottumwa.
 Newland, Don Hamilton, 1st Lieut., Belle Plaine.
 Nichols, Harry Carl, 1st Lieut., Carson.
 Nichols, Frank Lane, 1st Lieut., Sutherland.
 Nicolai, Paul, 1st Lieut., Livermore.
 Nilsson, Frederick Cornelius, 1st Lieut., Laurens.
 Norton, William Sheffield, Capt., Muscatine.
 Nyquist, David Munsen, 1st Lieut., Eldora.
 O'Brien, Stephen Ambrose, 1st Lieut., Mason City.
 Odell, Isaac Hugh, 1st Lieut., Albia.
 O'Donoghue, James Horation, 1st Lieut., Storm
 Lake.
 O'Keefe, John Elbert, 1st Lieut., Waterloo.
 O'Keefe, Charles John, 1st Lieut., Marble Rock.
 Osborn, Dean Hill, 1st Lieut., Monticello.
 Osborn, James William, Capt., Des Moines.



DR. J. W. OSBORN

Captain Medical Corps United States Army.
Services, twenty-five months, Ft. Riley.

Pace, A. A., Major, Toledo.
 Padgham, John Thomas, Capt., Grinnell.
 Palmquist, Nathaniel, Capt., Hormick.
 Parish, Ora Frank, 1st Lieut., Grinnell.
 Park, Elmer Remle, Capt., Sioux City.
 Park, Paul Archibald, 1st Lieut., Atkins.
 Parker, Edward S., Major, Ida Grove.
 Parker, Garner Forsemen, 1st Lieut., Pocahontas.
 Parker, H. C., Major, Dubuque.
 Parry, Roy Everett, 1st Lieut., Scranton.
 Pascoe, Irvin John, 1st Lieut., Harvey.
 Patchin, Horace Jarrett, 1st Lieut., Des Moines.
 Patterson, Charles Luther, Capt., West Side.
 Patterson, Samuel Tannier, 1st Lieut., Arthur.
 Patton, Charles Wilbur, 1st Lieut., Laurel.
 Paul, John Dale, 1st Lieut., Anamosa.
 Payne, Rosewell Herschell, 1st Lieut., Des Moines.
 Pearson, William Wilson, 1st Lieut., Des Moines.
 Pease, Herbert, 1st Lieut., Slater.
 Peck, Raymond Edward, Capt., Davenport.
 Peck, John Hyren, Major, Des Moines.
 Pelletier, Dyre Henry, Capt., New Hartford.
 Pence, Lawrence Walde, 1st Lieut., State Center.
 Pennington, Love Elree, 1st Lieut., Cherokee.
 Peppers, John Lewis, 1st Lieut., Goldfield.
 Peterson, Oscar Hedberg, Capt., Lamoni.
 Phillips, William Chamber, Capt., Clarinda.
 Pindell, Merl Lee, 1st Lieut., Macksburg.
 Pitcher, Jonathan Jay, 1st Lieut., Mt. Pleasant.
 Plummer, Herbert William, Capt., Lime Springs.
 Plummer, George Alfred, Capt., Cresco.
 Pond, Alanson Madison, Capt., Dubuque.
 Porter, James Arthur, 1st Lieut., Hedrick.
 Porterfield, Herbert De W., Lieut.-Col., Red Oak.
 Powell, Burke, 1st Lieut., Albia.
 Prentice, George Lee, Capt., Troy.
 Prescott, Lee Washbon, 1st Lieut., Sloan.
 Price, Alfred Stirgus, Major, Des Moines.
 Priessman, Frank Albert, 1st Lieut., Mechanicsville.

Puffett, George Frederick, 1st Lieut., Ames.
 Quick, Roy J., Lieut., Sioux City.
 Raby, William Greenville, 1st Lieut., Ft. Des Moines.
 Rankin, William, 1st Lieut., Keokuk.
 Ransom, Harry E., 1st Lieut., Des Moines.
 Rea, James Glen, 1st Lieut., Ft. Madison.
 Redmond, William Henry, 1st Lieut., Cedar Rapids.
 Redmond, John Patrick, Capt., Dysart.
 Reed, Lloyd Thomas, 1st Lieut., Gravity.
 Reed, Andrew Irvin, 1st Lieut., Grand Junction.
 Reich, Louis Philip, Capt., Fredericksburg.
 Reimers, Robert Stollt, 1st Lieut., Ft. Madison.
 Reynolds, Harry Rogers, Capt., Clinton.
 Reynolds, Earl Owen, 1st Lieut., Greenfield.
 Rhine, Arthur Calvin, Capt., Hampton.
 Rhodes, Frank Garretson, Capt., Sioux City.
 Rice, Earl, Capt., Ames.
 Richardson, Everett Eugene, 1st Lieut., Webster City.
 Riddle, Frank Palmer, 1st Lieut., Cedar Rapids.
 Risk, Howard, 1st Lieut., Oelwein.
 Roberts, Jay Gilber, Capt., Oskaloosa.
 Robinson, Raymond Eugene, 1st Lieut., Lost Nation.
 Rock, J. J., Capt., Iowa City.
 Rodemeyer, Frederick Henry, 1st Lieut., Alexander.
 Rogers, Edwin Clarence, 1st Lieut., Wapello.
 Rogers, Claude Bernard, Capt., Earlville.
 Rohlf, Edward Louis, Capt., Waterloo.
 Roost, Frederick, Lieut.-Col., Sioux City.
 Rose, Alvin Axley, 1st Lieut., Gilbert.
 Rose, Jesse Clifford, 1st Lieut., Farmersburg.
 Ross, Jr., Arthur James, 1st Lieut., Perry.
 Rowley, William Garfield, 1st Lieut., Sioux City.
 Rubel, Harry Francis, 1st Lieut., Struble.
 Ruml, Wentzle, Capt., Cedar Rapids.
 Rush, Weaver Aldus, Capt., Malvern.
 Ruth, Charles Edward, Major, Des Moines.



H. R. REYNOLDS, M.D.

Commissioned Lieutenant, June 20, 1917.

Active duty at Ft. Riley, August 25, 1917.

Asst. Instructor M. O. T. C., Ft. Riley, November 1, 1917 to July 5, 1918.

Commissioned Captain, May 23, 1918.

Camp San. Inspector, Camp Wheeler, July, 1918 to February, 1919.

C. O. Med. Det. and San. Inspector, Base Hospital, Camp Beauregard, La., February to April, 1919.

Camp San. Inspector, Camp Benning, Ga., April 18, 1919.

Ruyavitz, Joseph Larcher, Major, Duncombe.
 Ryan, John Gaston, Capt., New Sharon.
 Rybolt, Stephen Ballard, 1st Lieut., (deceased), Troy Mills.
 Saar, Jesse Lee, 1st Lieut., Cantril.
 Sabin, Albert Edward, 1st Lieut., Kirkman.
 Sage, Fred Carlton, Capt., Waterloo.
 Sallander, Frederick Warner, 1st Lieut., Sioux City.
 Sawyer, Prince Edwin, Capt., Sioux City.
 Scanlon, Franklin Raylor, Capt., Clear Lake.
 Schaefer, Paul Henry, Capt., Burlington.
 Schott, Harry Johnson, 1st Lieut., Sioux City.
 Schmaltz, Walter Franklin, 1st Lieut., Mount Ayr.
 Schooley, Alfred Heaton, 1st Lieut., Terril.
 Schroeder, Peter H., Davenport.
 Schrup, Joseph Henry, Capt., Dubuque.
 Schultz, Albert Andrew, Capt., Ft. Dodge.
 Scripture, James Levi, Capt., Clarksville.
 Seabloom, John L., Capt., Red Oak.
 Secoy, Frank L., 1st Lieut., Sioux City.
 Secoy, Harry Raymond, 1st Lieut., Iowa City.
 Seely, Charles Sidney, 1st Lieut., What Cheer.
 Seiler, Raymond Alvah, Capt., Blairstown.
 Sellards, Joseph Walter, 1st Lieut., Clarinda.
 Selman, Ralph Jackson, 1st Lieut., Blakesburg.
 Seymour, William Henry, Capt., Charles City.
 Shafer, Lee E., 1st Lieut., Davenport.
 Shane, Robert S., 1st Lieut., Pilot Mound.
 Shanon, Edwin Raymond, Capt., Waterloo.
 Shappel, Arthur E., 1st Lieut., Knoxville.
 Sheehan, Edward M., Capt., (deceased), Independence.
 Sheehy, Joseph Patrick, 1st Lieut., Sioux City.
 Shellito, Judd Campbell, 1st Lieut., Independence.
 Shelton, Charles Dalton, 1st Lieut., Bloomfield.
 Sherman, Alva Maynard, Capt., Clarinda.
 Shimer, Frank Elmer, 1st Lieut., Jesup.
 Shine, Dan William, 1st Lieut., Oelwein.
 Shirley, Wayne McKnight, 1st Lieut., Carroll.

Shore, Francis Edward Victor, Capt., Des Moines.
 Shryer, Julius Lewis, 1st Lieut., Durant.
 Shuman, John William, Major, Sioux City.
 Simeral, Fred Ernest, 1st Lieut., Brooklyn.
 Simons, James Daniel, 1st Lieut., Indianola.
 Simpson, Charles Edward, 1st Lieut., Norway.
 Skallerup, Walter Martin, 1st Lieut., Walker.
 Skinner, George Coleman, Capt., Cedar Rapids.
 Slattery, Joseph Thomas, 1st Lieut., Dunlap.
 Smith, Walter Albert, 1st Lieut., Donnelson.
 Smith, Fred C., 1st Lieut., Keokuk.
 Smith, Channing Gamalial, 1st Lieut., Granger.
 Smith, Albert Dwight, 1st Lieut., Mason City.
 Smith, Charles Francis, Major, Des Moines.
 Smith, Jason Ned, 1st Lieut., Iowa City.
 Smittle, Jacob M., Capt., Waucoma.
 Snearly, George Earl, 1st Lieut., Goodell.
 Snitkay, Chas. John, Major, Belle Plaine.
 Snyder, John Allen, 1st Lieut., Roland.
 Sollenbarger, George Hartley, Capt., Corydon.
 Sollis, Delmar B., 1st Lieut., Bedford.
 Sparks, Francis Rufus, Capt., Waverly.
 Spaulding, George Albert, Capt., Avoca.
 Speers, Will Fred, 1st Lieut., Davenport.
 Sproule, Egbert Wilson, 1st Lieut., Peterson.
 Standeven, John Frank, 1st Lieut., Hancock.
 Stansbury, John E., 1st Lieut., Cedar Rapids.
 Stauch, Martin Oscar, 1st Lieut., Whiting.
 St. Clair, Frank Earl, 1st Lieut., Hampton.
 Steele, G. H., Capt., Belmond.
 Sterling, A. S., 1st Lieut., Newton.
 Sternberg, Walter A., 1st Lieut., Mt. Pleasant.
 Stewart, Alexander Porter, 1st Lieut., Inwood.
 Stewart, Edgar Allen, 1st Lieut., Salem.
 Stiers, John Wilford, 1st Lieut., Muscatine.
 Stober, Raymond William, 1st Lieut., Charles City.
 Stoecks, William August, Capt., Davenport.
 Stokes, Frederick Alexander (colored), 1st Lieut.,
 Ft. Des Moines.

Stokes, Hugo Benton, 1st Lieut., Ft. Des Moines.
 Stoner, Alva Porter, Capt., Des Moines.
 Strickling, Frank Ellsworth, 1st Lieut., Birmingham.
 Strong, Arthur Churchill, 1st Lieut., Burlington.
 Strong, Elliott Sheldon, 1st Lieut., Iowa City.
 Studebaker, John Franklin, Capt., Fort Dodge.
 Stuhler, Louis George, 1st Lieut., Monticello.
 Swanson, John Emil, Capt., Sioux City.
 Swezey, Andrew Jackson, Capt., Decorah.
 Swift, F. J. Major, Maquoketa.
 Sybenga, Jacob John, 1st Lieut., Pella.
 Talbott, Eugene Finch, Capt., Grinnell.
 Talboy, James Henry, Capt., Onawa.
 Talley, Louis Franklin, 1st Lieut., Diagonal.
 Taylor, John Quill (colored), 1st Lieut., Ft. Des
 Moines.
 Taylor, Roscoe Durr, 1st Lieut., Spencer.
 Taylor, Charles Burr, Capt., What Cheer.
 Teemey, Thomas Novox, 1st Lieut., Iowa City.
 Thies, Edward Martin, 1st Lieut., Granville.
 Thomas, Clarence Irouth, 1st Lieut., Guthrie Center.
 Thomas, William Harper, 1st Lieut., McGregor.
 Thomas, Colin Gaudens, 1st Lieut., Monticello.
 Thomas, Hollis Sherman, 1st Lieut., Oakdale.
 Thompson, Howard Randall (colored), 1st Lieut.,
 Ft. Des Moines.
 Thornburg, William Vestal, 1st Lieut., Yale.
 Thornton, James W., Capt., Ackley.
 Throckmorton, R. Fred, Capt., Derby.
 Tidball, Charles Willis, 1st Lieut., Independence.
 Tinsley, Thomas Clinton, 1st Lieut., Ft. Des Moines.
 Traverse, Isaac Wilsey, Capt., Ft. Madison.
 Trey, B. E., 1st Lieut., Marshalltown.
 Trotter, William M., Capt., Maxwell.
 Tubbs, Roy Burney, 1st Lieut., Council Bluffs.
 Tyrrell, Joseph Walters, 1st Lieut., Des Moines.
 Van Dyke, John Henry, 1st Lieut., Cedar Falls.
 Van Epps, Clarence, Major, Iowa City.
 Van Meter, Fletcher Jackson, 1st Lieut., Clarinda.

Van Patten, Clyde Leslie, 1st Lieut., Anamosa.
 Van Voorhis, Clyde Randolph, 1st Lieut., Prairie
 City.
 Vander Veer, Frank Leroy, Capt., Cedar Falls.
 Verpahl, Rudolph Augustus, 1st Lieut., W. Cedar
 Rapids.
 Voigt, Benjamin John, 1st Lieut., Spencer.
 Wahrer, Frederick Louis, 1st Lieut., Fort Madison.
 Walker, Ben S., Capt., Corydon.
 Walker, Will George, Capt., Corydon.
 Walker, John Milton, Capt., Dubuque.
 Walker, John Riley, Capt., Ft. Madison.
 Wallace, Louis O. S., 1st Lieut., Cherokee.
 Wallace, Robert More, 1st Lieut., Algona.
 Wallace, James Carroll, 1st Lieut., Ft. Des Moines.
 Walsh, Thomas Nelson, 1st Lieut., Hawkeye.
 Ward, Dell Warner, 1st Lieut., Oelwein.
 Ward, Loraine William, 1st Lieut., Fairbank.
 Waters, Ralph Milton, Capt., Sioux City.
 Watkin, Clifford Roy, 1st Lieut., Sioux City.
 Watts, A. Fred, 1st Lieut., Iowa City.
 Weaver, John Otis, 1st Lieut., Shenandoah.
 Weber, William Wirth, 1st Lieut., Hartford.
 Wehman, Edward John, Capt., Burlington.
 Weidlein, Floyd Henry, 1st Lieut., Wellman.
 Weih, Elmer Paul, 1st Lieut., Clinton.
 Weiss, John Michael, Capt., Knoxville.
 Wells, Clifford W., Capt., Des Moines.
 Wenzlick, Geo. John, 1st Lieut., Iowa City.
 Wescott, LeRoy Anderson, Capt., Cherokee.
 West, Harry Delbert, 1st Lieut., Des Moines.
 Westley, Gabriel S., 1st Lieut., Ft. Dodge.
 Weston, Burton French, Capt., Mason City.
 Wheeler, Edwin Ruel, 1st Lieut., Swingle.
 Whitmore, Frank Beach, 1st Lieut., West Union.
 Whitaker, Ben Tallman, Capt., Boone.
 White, Edward Harvey, 1st Lieut., Dubuque.
 White, Winfield March, 1st Lieut., Sioux City.
 White, Seward, 1st Lieut., Olin.

White, Herman Alexander, Capt., Clinton.
 Whitehill, Nelson McPhee, Capt., Boone.
 Whiteley, Joseph Hall, Capt., Bonaparte.
 Wickham, Emmett Terry, Capt., Washington.
 Wildman, William Murray, Capt., Fort Dodge.
 Wilkinson, Harry Blaine, 1st Lieut., Perry.
 Will, Frank A., Capt., Des Moines.
 Willis, Theodore Alan, 1st Lieut., Clear Lake.
 Wilson, Edmund Willoughby, 1st Lieut., Rolfe.
 Wilson, John Hiram, 1st Lieut., Mount Hamill.
 Wilson, Arthur Henry (colored), 1st Lieut., Ft. Des
 Moines.
 Wilson, Roske Jerome, 1st Lieut., Ft. Des Moines.
 Winkler, Frank Paul, 1st Lieut., Sibley.
 Winnett, Joseph Roderick, 1st Lieut., Eldora.
 Winter, Malcolm Duncan, 1st Lieut., Iowa City.
 Wirsing, Arnold Oswald, 1st Lieut., Iowa City.
 Wolfe, Joseph Herbert, 1st Lieut., Iowa City.
 Wolfe, Channing Elmer, 1st Lieut., Coon Rapids.
 Wood, Rollin Webster, 1st Lieut., Newton.
 Woodbridge, James Warren, Major, Cylinder.
 Woodbury, Ernest Irving, Capt., Burlington.
 Woodruff, Robert Henry, Capt., Charles City.
 Worley, William Hammond, Capt., Nodaway.
 Wray, Clarence McCarty, 1st Lieut., Iowa Falls.
 Wright, John Robert, 1st Lieut., Knoxville.
 Wright, Howard Jesse, Capt., Des Moines.
 Wuttke, Edwin Edward, 1st Lieut., Sumner.
 Yates, George Spurgeon, 1st Lieut., Des Moines.
 Yavorsky, George William, Capt., Belle Plaine.
 Yenerich, Charles Otis, 1st Lieut., Rockford.
 Yoder, Edwin Cleveland, 1st Lieut., Iowa City.
 Yoder, Boyden Benedict, 1st Lieut., Northwood.
 Young, Russell Montague, Capt., Red Oak.
 Young, Guss Bross, Capt., Des Moines.
 Youtz, H. Lamont, Capt., Des Moines.
 Zuercher, Arlo Richard, 1st Lieut., Cedar Rapids.

